**Chandra C** [A blue and white logo with white stars

Description automatically generated](https://learn.microsoft.com/en-us/users/chandrasekharchebrolu-7945/credentials/63db5fe0653fbca0?ref=https%3A%2F%2Fwww.linkedin.com%2F)

**Sr. Cloud/DevOps Engineer**

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| **PROFESSIONAL SUMMARY** |

With **8 years** of **IT** experience, I am a highly motivated **Cloud Infrastructure Engineer** and **DevOps Specialist**, skilled in managing **complex** environments across **Microsoft Azure**, **Amazon Web Services (AWS)**, **Google Cloud Platform (GCP)**. I have extensive experience and proficiency in a wide range of areas, including **Infrastructure Automation**, **Configuration Management**, **Build/Release Management**, **Container Orchestration**, **Cluster Management**, Continuous Integration, Continuous Deployment **(CI/CD)** and **System Administration**. Additionally, I am well-versed in **Agile** and **Scrum methodologies**, ensuring efficient collaboration and iterative development processes.

* **Certified Azure Administrator** with expertise in **Azure Cloud Services**, including experience with **Azure Platform Development**, Deployment Concepts and Hosted Cloud Services **(IaaS, PaaS, SaaS)**.
* Experience in deploying **Azure Landing Zones** and various **Azure IaaS services** using **Azure Bicep**, including **Virtual Machines, Virtual Networks**, Load Balancers, VPN Gateway, Azure Monitor, and **Azure Kubernetes Service** (**AKS**).
* Expertise in **Azure administration**, **infrastructure automation** using tools like **ARM**, **Bicep**, and **Terraform**, and resource deployment through **Azure DevOps** pipelines and **GitHub** actions.
* Proficient in configuring **Azure Databricks clusters**, integrating with **GCP's BigQuery** and **Azure Data Lake Storage**. Also seamlessly integrated **Amazon S3** into **Azure Databricks** using **Azure Batch** for efficient data ingestion, enhancing analytics and machine learning tasks.
* Strong experience in implementing identity and access management solutions using **Microsoft Azure Active Directory (AAD)** and **Windows Active Directory (AD)**, including **IAM roles** and **Role Based Access Controls (RBAC)**. Expertise in Azure AD for user **lifecycle management**, group provisioning, **SAML 2.0/OpenID Connect integrations**, and **secure remote** access via Azure AD Application Proxy.
* Leveraged **fault tolerant** and **disaster recoverable** storage solutions utilizing **Azure Blob Storage, Azure Files, Azure Data Lake Storage, Azure Key Vault, Azure SQL** and implemented **encryption** policies to provide security to the data.
* Experience in handling network **vulnerabilities** with defining strong **Network Protocols**, **Network Security rules** across **Virtual Networks**, Subnets, **Application Gateways** and configured **Azure DNS**, VPN, **Network Peering** and Traffic Manager, **Azure Web Application Firewall (WAF)**.
* Experience in **migrating** **Oracle Cloud NoSQL** database to **Azure Cosmos DB** to ensure the **global distribution** of data to achieve **low latency** and **high availability**.
* Proficient with administrating **AWS** services including **ELB, EC2, ECS, Auto-Scaling, S3, IAM, VPC, RDS, Red Shift, DynamoDB, Cloud Trail, Cloud Watch, Elastic Cache, Lambda, SNS, Glacier, SQS, EFS,** and **Storage Gateway.**
* Administered **AWS** Identity and Access Management (**IAM**) accounts, implementing **MFA** to enhance account security, and configuration of **IAM** **policies** and **roles** for granular access control within **AWS** environments.
* Extensive experience in migrating **on-premises** infrastructure to **Azure,** ensuring **secure** network communication during the **migration**. Also, led the **migration** from **AWS** to **Azure** using **Azure Migration Service**. Experience in automation using **PowerShell** **scripts** to manage **virtual machines**, **storage accounts** and **virtual networks** in using Azure PowerShell module.
* Experience in integrating **GitHub Actions** with **Azure DevOps**, leveraging **Go language scripts** within **CI/CD pipelines** to enhance and optimize software delivery processes. Additionally, I employed **Azure Boards** and **Kanban boards** to monitor and track the progress of the project.
* Created **POC** for the migration from **AWS** to **Azure** optimizing the **compatibility**, **cost**, **performance** using **Azure migrate** and leveraged the performance of **Azure pipelines** enhancing the deployment performance.
* Experienced with **GCP** with respect to integrating **DevOps tools** including **Code Build** and **Code Deployment Manager** enhancing the deployments**.**
* Developed **Shell** and **Python** scripts for automating infrastructure provisioning and deployment tasks, improving operational efficiency in cloud environments, and integrating with **ArgoCD** for streamlined **CI/CD** workflows.
* Proven expertise in **troubleshooting** containerized environments and deploying **Kubernetes** clusters to orchestrate **Docker** containers using **RedHat** **OpenShift** across multiple environments including **Development**, **Quality**, and **Production**.
* Led Greenfield projects deploying applications through **Azure DevOps** **CI/CD pipelines**, leveraging **Docker** for artifact builds and Azure Kubernetes Service **(AKS)** for container orchestration. Skilled in **troubleshooting** pipeline issues and optimizing deployments for efficient container management in **AKS** clusters.
* Experienced in deploying microservices and **.NET** applications on **Kubernetes** clusters, leveraging **Docker** for **containerization**, **Helm charts** for efficient management, and ensuring secure communication with **Istio**.
* Deployed **microservices** into **AKS clusters** using **Azure DevOps** pipelines and integrated **Prometheus** agents to collect metrics and logs. Utilized **mean time to resolution (MTTR)** analysis to identify and address operational issues promptly, ensuring optimal cluster performance and reliability.
* Implemented comprehensive monitoring and **incident management solutions** using **ELK Stack** (Elasticsearch, Logstash, Kibana), **Prometheus**, **Grafana**, **Splunk**, **CloudWatch**, **Nagios**, **Azure Monitor**, **Datadog**, **New Relic**, and **Azure Log Analytics**, integrated seamlessly with **JIRA** and **ServiceNow** for efficient monitoring, performance analysis, and incident management workflows.
* Strong experience in **Terraform** for **automating** the creation and management of infrastructure on **Azure** and **AWS** cloud platforms, leveraging essential features like **Infrastructure as Code**, **Execution Plans**, **Resource Graphs**, **Change Automation**, and **State Management**.
* Developed and deployed reusable **Terraform modules**, utilizing **backend** components to store the state file in a remote repository continuously, thereby preventing discrepancies when other team members apply changes to the existing infrastructure.
* Proficient in Infrastructure as Code (IaC) using **Terraform**, **ARM Templates**, **CloudFormation**, and **Bicep**, with experience designing templates to manage infrastructure components across **Azure** and **AWS** environments.
* Proficient in implementing Azure **DevSecOps** methodologies to seamlessly integrate **security** measures into the development pipeline. **Orchestrated** automated security processes using tools like **OWASP** for **vulnerability scanning** and compliance checks.
* Leveraged **HashiCorp Vault** for secrets management and **Azure Key Vault** for secure key storage, ensuring robust data protection and **confidentiality** throughout the **development lifecycle**.
* Experienced in leveraging **Distributed Application Runtime** **(Dapr)** to build cloud-native applications with ease, enhancing scalability, resilience, and **portability**.
* Implemented **GitOps** methodologies using **Jenkins pipelines** to automate **Docker image builds** and **Kubernetes deployments**, optimizing **CI/CD** workflows through **log** analysis and troubleshooting.
* Proficient in managing project dependencies and streamlining build processes through the utilization of **Gradle** and **Maven**. Experienced in version control systems including **Git**, **JFrog**, **Bitbucket**, and **SVN**, adept at implementing **branching**, tagging, and **merging** strategies to optimize development workflows.
* Implemented **SonarQube** quality gates in **CI/CD** pipelines, incorporating tools like **Checkmarx**, and **Fortify** to uphold code quality and coding standards, facilitating proactive issue identification and resolution during the development lifecycle.
* Experienced in designing and implementing **APIs** using Azure API Management **(APIM)**, including **API gateways**, policies, developer portals, **Azure Functions**, Logic Apps, OAuth, OpenID Connect, and **Azure DevOps** for **CI/CD** pipelines, ensuring robust deployment and versioning practices.
* Implemented **LDAP** authentication and authorization with **SSL/TLS** encryption for secure communication, and configured various services including **DHCP**, **DNS**, **SSH**, **SFTP**, **Telnet**, RPM Package Management, and SMTP using **APT** and **YUM** for seamless functionality and performance.
* Experienced in utilizing **ANSIBLE** to automate the setup of **OpenStack Control Plane** and **software deployment**, alongside proficient use of **Jenkins** for server configuration tasks.
* Effectively leveraged **Ansible** and **Ansible Tower** for **automating tasks**, **orchestrating application deployments**, and managing changes, employing **Python scripting** and **custom Playbooks** to enforce robust deployment strategies and uphold **data security** standards.
* Implemented deployment environments within **AKS** and **EKS** clusters, configuring monitoring solutions like **App Insights**, **Prometheus**, and **Grafana** to analyze application performance and health. Deployed **monitoring dashboards** across different deployment stages to ensure optimal functionality and reliability.
* Possess strong experience in **installing**, **updating**, and **maintaining** **RedHat Enterprise Linux**, Linux, Unix, Sun Solaris, and **Windows-based** environments, including proficient handling of patching and knowledge of application deployment in **Apache tomcat**, **Nginx** and **JBoss** servers.
* Utilized **JIRA**'s Agile boards, including Scrum and Kanban, to **track** and manage **defects** and **incidents**, consistently achieving **SLA** compliance by providing **RCA** for resolutions in production environments.

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| **TECHNICAL SKILLS** |

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| Cloud Platforms | Microsoft Azure, Amazon Web Services, Google Cloud Platform. |
| CI/CD Tools | Jenkins, VSTS, Bamboo, Travis CI, ArgoCD, GitLab CI/CD. |
| Containerization tools | Kubernetes, Docker, Docker Swarm, RedHat OpenShift. |
| Build Tools | Maven, ANT, Gradle, MS Build. |
| Version Management Tools | GIT, Bitbucket, Azure Repos, Nexus, SVN, GitHub, GitLab. |
| Configuration Management & IAC tools | Ansible, Chef, Puppet, Terraform, Bicep, ARM templates, CloudFormation. |
| Monitoring and Logging Tools | Prometheus, Grafana, CloudWatch, Nagios, Splunk, Azure monitor, Datadog, AppDynamics, New Relic. |
| Databases | MySQL, Aurora, RDS, Azure Cosmos DB, NoSQL (MongoDB, DynamoDB). |
| Application Servers | Apache Tomcat, Red Hat JBOSS 4.22.GA, WebSphere. |
| Networking/Protocols | TCP/IP, DNS, DHCP, WAN, SMTP, LAN, FTP/TFTP, SSH. |
| Operating Systems | Linux (RedHat Enterprise Linux, CENTOS, FEDORA), Amazon Linux, Ubuntu 12/13/14, DEBIAN, Windows, Mac. |
| Programming/Scripting languages | Golang, Python, YAML, Ruby, Bash, PowerShell, Groovy. |
| Issue Tracking Tools | JIRA, Remedy, IBM Clear Quest, ServiceNow. |
| Virtualization Platforms | Oracle VirtualBox, VMware, vSphere, Vagrant. |

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| **PROFESSIONAL EXPERIENCE** |

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| **Sr Azure Cloud Infrastructure Engineer SEP 2022 - Present**  **Bayer – Dallas, Texas.** |

* Implemented **Azure Active Directory Connect (AD Connect)** with **Password Hash Synchronization (PHS)** and **Pass-through Authentication (PTA)** to seamlessly synchronize on-premises identities with **Azure AD**, ensuring consistent credential access and streamlined access management across hybrid environments.
* Implemented **Azure AD** integrations with **SAML 2.0** and **OpenID Connect** protocols to enable seamless **single sign-on (SSO)** across critical business applications like **ServiceNow** and configured **Azure AD Application Proxy** for secure remote access and SSO to internal web applications for distributed teams.
* Established secure connectivity between **Azure** and **on-premises** environments by deploying **Azure Virtual Networks** and configuring **Network Security Groups**, while implementing robust network security measures with **Azure Defender,** **Azure Web Application Firewall**, **VPN Gateway**, and **ExpressRoute** to ensure defenses and establish dedicated, reliable connections.
* Deployed **web applications** on Azure Virtual Machines using **Apache Tomcat**, ensuring scalability, customization, and seamless integration with **Application Insights** for monitoring, with **APIs** configured to upload logs to **Azure Blob Storage**.
* Proficient in configuring **Azure Databricks** clusters and integrating them with **Azure Data Lake Storage**.
* Implemented and configured **REST APIs** within **Azure Functions** to seamlessly integrate with **Azure Blob Storage**, leveraging fine-grained access control using **Shared Access Signatures (SAS)** for secure and time-limited access to specific resources.
* Migrated **Oracle NoSQl database** to **Azure Cosmos DB** as the data is replicated to multiple regions which provides **low latency** and **high availability** of the database service.
* Designed **Azure functions** and integrated with **Dapr** to analyze the data from **Azure Data Lake Storage** to generate daily reports for various data engineering teams to generate insights**.** Configured **Azure Monitor** to monitor the logs of the **Azure functions** for any failures.
* Utilized **Azure Key** **Vault** to securely retrieve encryption keys for configured applications, automating certificate renewal and providing monitoring for certificate expiration.
* Automated the deployment of **virtual networks**, **storage accounts**, and **virtual machines**, while utilizing **Terraform** modules for modular and reusable infrastructure definitions using **Azure CLI**.
* Proposed and implemented a **POC** utilizing **Azure Service Fabric**, cutting deployment and maintenance costs by nearly **50%**.
* Leveraged **Dapr** for **cloud-native** app development, boosting scalability, resilience, and portability. Utilized its **microservices** runtime and **pub/sub** capabilities for faster deployment and development.
* Proficient in orchestrating seamless deployments leveraging **Azure Repos**, **Azure Boards**, **Azure Pipelines**, Azure Test Plans, **Azure Artifacts**, and **AKS**, while also addressing **JIRA-related** challenges through effective integration and custom workflow solutions.
* Provided **persistent volumes** for the **AKS cluster** using **Azure Disk storage** for the **worker nodes** and **Azure Files** for the **PODs** in the cluster.
* Established **CI/CD** pipelines with **Azure DevOps** and **Git Repos**, utilizing **Azure Pipelines**, **Docker**, and **Azure Kubernetes Service (AKS)** for swift software delivery and consistent releases.
* Implemented **Azure DevSecOps** strategies, automating security processes like **vulnerability scanning** and **compliance checks** with tools like **OWASP**, seamlessly integrating security measures into the development pipeline.
* Utilized **Azure Container Instances** for automated **application deployment**, ensuring efficiency and reliability while reducing resource costs by **20%**.
* Led design efforts to create **ARM templates and PowerShell scripts** for streamlined deployments to **Azure Kubernetes Service** **(AKS)**.
* Collaborated with **DevOps** teams to integrate **Azure Bicep** templates into **CI/CD** **pipelines**, enabling **continuous deployment** and automated testing of infrastructure changes.
* Deployed and configured **Azure Bastion** **host** to provide **secure RDP** and **SSH** access to **Azure virtual machines**, enhancing **network security** and **reducing attack layers** through public network connections.
* Managed serverless deployments via **Jenkins** and **cloud-native** services for scalable operations. Automated real-time testing with **Selenium** and **JUnit** in **Jenkins** for swift feedback and top-notch software quality.
* Enhanced deployment processes by integrating **Python scripts** within deployment tasks, tailoring deployment workflows to meet specific requirements and optimize deployment efficiency.
* Employed **Python** and **Golang** scripts for automating post-deployment tasks such as environment validations and **API** health checks, ensuring seamless deployment and optimal application performance in **production**.
* Created **Dockerfiles** to encapsulate dependencies for seamless deployment in containerized environments, integrating them into source repositories for automatic execution within **CI/CD** pipelines.
* Managed **Kubernetes** manifest files with **Helm** charts, ensuring reproducible deployments featuring **Ingress**, **Secret**, **Service**, **Replicas**, **Config Map**, and **Persistent Volumes**, overseeing **Helm** package releases for streamlined deployment via **Azure CLI**.
* Utilized **HashiCorp Vault** to securely manage and encrypt credentials for **Terraform** modules across projects, generating dynamic short-term credentials to mitigate risks associated with long-term access.
* Employed **Terraform** alongside **Packer** to create **golden machine images**, utilized **Ansible** for software installation post-provisioning, and integrated **security patches**, **firewalls**, and **interfaces** to ensure resilient infrastructure deployment.
* Proficient in utilizing **Dapr's** microservices runtime, service invocation, **state management**, and pub/sub capabilities to streamline development and deployment processes, accelerating **time-to-market** for modern applications.
* Integrated **Ansible Tower** smoothly with **Git** repositories, **CI/CD pipelines**, and ticketing systems to improve operations, boost automation capabilities, and enhance workflow efficiency, while ensuring stronger security through **RBAC** policies for effective access **control** and **permissions** management.
* Orchestrated infrastructure configuration using **Ansible playbooks** and **roles**, leveraging **Ansible Galaxy** for reusable automation components. Employed **YAML** scripting and a diverse array of **Ansible** modules to efficiently manage and configure files across **distributed** servers, **optimizing** **system deployment** and **management processes**.
* Configured **Azure Log Analytics Workspace** and **Dynatrace** to manage **bulk logs** generated from **AKS** clusters, subsequently employing a Logic App to shift through and extract pertinent logs. Integrated an **Event Hub** to seamlessly transfer the filtered logs to **Splunk** for comprehensive analysis and monitoring.
* Involved in creation of customized **Splunk dashboards** and **reports**, meticulously crafted to meet the unique monitoring and reporting needs of **Azure infrastructure** and application teams, providing actionable **insights** into system health and **performance metrics** to enable informed decision-making and proactive maintenance strategies.

**Environment:** Azure Virtual Machines, Application Insights, Amazon S3, AWS Lambda, GCP’s BigQuery, Active Directory, Azure Databricks, IAM roles, RBAC, Network Security Groups, Azure Data Lake Storage, Azure Firewall, VPN Gateway, Express Route, Azure Functions, Azure Cosmos DB, Azure Monitor, Azure Key Vault, Azure Kubernetes Service, Helm, ACR, ARM, Azure Log Analytics, Dynatrace, Splunk, Ansible Tower, Git, Terraform, Docker, Kubernetes, Azure Event Hub, Azure DevOps, Golang.

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| **Azure Cloud DevOps Engineer**  **MAR 2021 - JUL 2022**  **LexisNexis - Raleigh, NC.** |

* Experience in working with various key **Azure services** like **Azure Virtual Machines**, **Azure Functions**, **Azure App Service**, **Azure Blob Storage**, **Azure Files**, **Azure Virtual Network**, **Azure SQL Database**, **Azure Key Vault** to provide various infrastructure requirements across the project.
* Collaborated and led the **infrastructure** team to efficiently migrate and deploy web applications to **Azure App Services** and configured **Azure SQL database** and **Azure files** for various requirements to manage the data produced by the applications.
* Implemented **Azure Active Directory** and **LDAP** for seamless **Single Sign-On** access to **Office 365** within the project, while managing the access using **IAM policies** and **RBAC** to access or modify the resources.
* Experience with **Azure B2B**, **Azure B2C** to provide **authorization** and **authentication** to access the resources within **On-Premises** and **Azure** environments.
* Experience with **ARM** templates to configure **Resource Groups**, **Virtual Machines**, **Storage accounts**, **Virtual Networks** for various business requirements to configure **webservers** and host web applications on the servers.
* Implemented deployment of a three-tier **Spring Boot application** on **Azure Service Fabric**, enhancing development and deployment of **Stateful** and **Stateless** microservices while ensuring **fault tolerance** and **auto-scaling** for uninterrupted application availability.
* Integrated **Service Fabric** with **Azure Monitor** for monitoring application health and metrics, implementing alert rules and action groups for team notification.
* Migrated on-premises **web servers to** **Azure Virtual Machines** for hosting internal web applications, integrated **Application Insights** for **monitoring**, utilized APIs to upload logs to **Azure Blob Storage**, and managed access restrictions through **Azure Active Directory (AD)** tenants.
* Established communication between separately deployed applications on **Azure VM**s and a **MongoDB** server configured on different VMs in separate VNETs by enabling **VNET peering**.
* Configured secure communication to the **Azure files** by creating a private endpoint using **Azure Private Link** with proper **NSG** policies to provide restricted access.
* Enabled hybrid connectivity by configuring communication from **On-Premises** networks through **ExpressRoute** VPN connections, bypassing public networks to access resources in **Azure VNET**s. Proficient in configuring **NSG**s, **Point-to-Site VPNs**, and **Site-to-Site VPN**s to facilitate secure communication into **VNET**s from various private networks and devices, adhering to the principle of least privilege.
* Designed **Azure Pipelines** in **Azure DevOps** for **Git** source code integration, **Docker** containerized builds, and artifact publication to **Azure Container Registry**, enhancing version control and **CI/CD** efficiency.
* Integrated **Log Analytics** with **Azure DevOps pipelines** to collect and analyze logs across build, test, and deployment processes. Developed custom log queries for detailed analysis of build and release logs stored in **Azure Monitor**.
* Configured multi-environment CI/CD pipelines, integrating **Jenkins** for **Continuous Integration** and artifact creation in **Azure Container Registry**, followed by deploying these artifacts from ACR into **AKS** clusters using **Azure pipelines**.
* Integrated **Azure DevOps** with **Kubernetes** monitoring and logging tools such as **Prometheus** and **Grafana**, enhancing real-time visibility into cluster performance and application behavior, thereby ensuring effective monitoring and analysis capabilities.
* Configured **Prometheus** alerts using **Azure Monitor** data for comprehensive monitoring and timely **JIRA** incident response, enhancing infrastructure and application reliability.
* Designed **Dockerfiles** for artifact encapsulation and **Docker Compose files** for **UAT deployment**, utilizing volumes for **persistent storage** and data sharing between containers.
* Expert in automating deployment, scaling and management of containerized applications across clusters of nodes. Managed the clusters using master node components like **API Server**, **Controller manager, etcd** and **scheduler**, **worker node** components like **kubelet** and **kube-proxy**.
* Deployed and managed **Kubernetes** clusters with **Spinnaker**, automating application deployments, rollbacks, and canary analysis, and integrating **Dapr** for microservices management.
* Worked on pod communication and **load balancing** among the pods using **Kubernetes** services and **Nginx** **Ingress controllers** using the **Kubernetes** deployment manifest files to specify **desired application deployments**, **Config Map**, **Ingress**, **Secret**, **replicas, Persistent Volume claims** and **service** endpoints.
* Utilized **Python** **scripts** to automate retrieval of work item details from **Azure DevOps** via its REST API, streamlining project management processes and enhancing efficiency in **task tracking** and **monitoring**.
* Worked with **Python scripts** to **trigger Azure Pipelines** builds programmatically through the **Azure DevOps** **REST API**, optimizing deployment workflows and facilitating seamless integration with **CI/CD** pipelines for software development projects.
* Automated the deployment of **web applications** on **Azure infrastructure** by integrating **Terraform** for provisioning and **Ansible** for configuration management, optimizing deployment processes and ensuring consistent and reliable infrastructure across environments.
* Integrated **Terraform** into CI/CD pipelines using **GitLab** **CI/CD** to automate infrastructure deployment and configuration changes. Implemented infrastructure testing and validation within pipelines using tools like **Terra test** or **Inspec** for correctness and reliability of **Terraform** configurations.
* Utilized **Terraform** state files effectively to keep track of **current state** of managed infrastructure resources and determine the differences between **desired** and actual infrastructure configurations during plan and apply operations.
* Implemented **Terraform state management** using backend components to securely store and share state files in remote storage. Utilized **Terraform import** to restore existing infrastructure state, ensuring anomaly-free changes.
* Implemented **Ansible playbooks** to automate disaster recovery processes and configure high availability setups for critical infrastructure components, ensuring business continuity and minimizing downtime in case of failures.
* Created **Ansible inventory files** and developed various **Ansible modules** to perform various tasks like **packages**, **files**, **users**, services and executed these modules in the Ansible playbooks to minimize the manual work and ensure reliability and efficiency of the tasks to be performed.
* Utilized **Ansible tower** to schedule automation jobs to run at specific times or intervals allowing more flexible and efficient management of infrastructure tasks. Imported and managed inventory files from external sources and organized hosts into groups for various environments.

**Environment:** Azure Virtual Machines, Azure Key Vault, Azure App Services, Azure SQL Database, VPN, Network Security Groups, Azure VPN Gateway, Azure Functions, Azure AD, Azure Blob Storage, Azure Data Factory, Azure Files, Azure Container Registry, Log Analytics, Azure Cosmos DB, AKS, Azure DevOps, Azure Pipelines, Docker, Azure Service Fabric, GitLab, Helm, Azure Monitor, Prometheus, Azure Alerts, Terraform, Ansible, Python, Kubernetes.

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| **AWS DevOps Engineer OCT 2018 - FEB 2021**  **Bank of America - Chandler, AZ.** |

* Experienced in working with key **AWS** services like **EC2, IAM, ECS, S3, EBS, Glacier, KMS, DynamoDB, VPC, Route 53, CloudWatch, EKS, EFS**. Efficiently designed, implemented, and managed infrastructure using **IaC** tools such as **CloudFormation**, **Terraform** and **AWS CDK**.
* Defined **IAM roles** and access policies to enforce least privilege principles, ensuring secure resource access for users and groups across the organization's **AWS** environment.
* Experience in **automation** of deploying **Restful web services** using **AWS Lambda Functions** to provide scalability and availability of the web services using **CloudFormation** templates.
* Worked on **Cloud Formation templates** for quickly deploying the **front-end** application on **AWS Elastic Beanstalk** and enabled **autoscaling** to efficiently handle the traffic into the application and configured **CloudWatch** to keep track of the performance of the application.
* Configured **MongoDB** on **EC2** instances with autoscaling in a dedicated **VPC** across multiple zones. Implemented robust **IAM roles** and access policies for least privilege access. Utilized **AWS Secret Manager** for secure password storage and access.
* Implemented **lift and shift** strategy utilizing **AWS Database Migration Service** to migrate a **Google Cloud SQL** database to **Amazon RDS**. Migrated virtual machines hosting web servers from **GCP** to **AWS** using **AWS Server Migration Service**.
* Experience in configuring **AWS Glue** for the data analytics team to provide serverless environment to create **ETL** jobs to process the data from **Amazon RDS** database.
* Designed **CloudFormation** **templates** to deploy a **Java backend application** following security protocols at every layer of the network into **VPC**, including **subnets**, **NAT gateway**, **security groups**, and a **load balancer.** Configured **S3** for storing large volumes of data with high **durability** and **availability**.
* Utilized **AWS CodeDeploy** for automated **CI/CD** pipelines, deploying **Node.js** and **Python** modules via **AWS CodePipeline.** Ensured pipeline security with **IAM roles** and policies, granting controlled access to development and **production** teams.
* Integrated **AWS Systems Manager Session Manager** with **AWS Identity and Access Management (IAM)** to enforce fine-grained access controls, **role-based** access, and **multi-factor authentication (MFA)** for user sessions.
* Optimized **AWS** resource costs using **AWS budgets** and **Cost Explorer**, reducing expenses by 25%. Implemented cost-saving strategies for testing deployments, creating temporary **EC2 instances** with required configurations and terminating as needed.
* Utilized **Terraform** efficiently to reduce manual work by **60%** to ensure consistency across **development**, **test** and **production** environments.
* Created **Jenkins pipelines** to continuously identify the source code merges into **Git** repository using **webhooks**, tested the code coverage using **SonarQube** and generate artifacts and used **ArgoCD** to deploy the artifacts.
* Configured **multibranch pipelines** to incorporate parallel development to perform various individual build and tests on the respective branches and reduced **40%** of waiting for the other jobs to complete when configured in a single job.
* Implemented **Canary deployment** for the **API** with large userbase and complex features, which allowed the team to gradually rollout the changes and monitor for any performance issues. Automated incidents to analyze the issue and identify the root cause and implemented best solutions.
* Experienced in creating containerized environment using docker and configuring Kubernetes for deploying applications and their dependencies using the features like **kubectl**, **kubelet** and configuring the **service**, **ingress**, **secret** and **persistent volumes** to store the data of **stateful applications**.
* Utilized various AWS storage services such as **EFS** and **EBS volumes** to manage the **persistent storage** for the EC2 instances running the worker nodes in the **EKS** cluster and mounted **EFS** to recover the state of the **PODS**.
* Utilized **Terraform's** state management features to maintain the state of infrastructure, promoting collaboration among team members and ensuring consistency in resource provisioning and management.
* Engineered reusable **Terraform** modules in **AWS**, integrating with **Packer** for customized machine images and **Ansible** **playbooks** for software installation post-provisioning, while ensuring robust infrastructure deployment.
* Led the design efforts in creating **AWS CloudFormation templates** for efficiency of deployments into **Amazon Elastic Kubernetes Service (EKS)**, leveraging **Terraform** capabilities to ensure optimal efficiency and consistency in infrastructure provisioning.
* Integrated **ELK Stack (Elastic Search, Logstash, Kibana)** with the **EKS cluster** to store the logs, process them using **Logstash** pipelines to store the daily logs into **Elastic Search** and **Kibana** for visualizing and analyzing the logs.
* Strong experience in setting up **alerts** using **Kibana** and troubleshooting deployment **failures, POD failures** in Production environments.
* Worked with **Ansible Playbooks** to **automate** the configuring of **security policies,** **network troubleshooting**, **file management** on the **EC2 worker nodes** in the **EKS clusters**.

**Environment**: AWS EC2, IAM, S3, EBS, VPC, Route 53, CloudWatch, CloudFormation, EKS, EFS, AWS CDK, Terraform, Ansible, Packer, Jenkins, Kubernetes, Canary, Persistent Volumes, Git, Subnets, NAT Gateway, Elastic Load Balancing, AWS Secret Manager, AWS Budgets, AWS Cost Explorer, ELK Stack, Kibana.

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| **DevOps Engineer**  **AUG 2017 - OCT 2018**  **Tata Consultancy Services**  **Client: Mars - Hyderabad, India.** |

* Implemented Jenkins pipelines on **GCP** using **Google Compute engine** to configure servers like **Jenkins**, **SonarQube,** **OWASP** and **Google cloud storage** for artifact storage, deployed the artifacts into **Kubernetes**.
* Experience in configuring **Google Cloud Firewall rules** and **Network policies** to control inbound and outbound traffic into the **Kubernetes clusters**. Implemented **Google Cloud HTTPS Load Balancer** to manage and scale the **ingress** traffic efficiently.
* Utilized **Travis CI** and **Circle CI** to automate build, test, and deployment processes within **GCP's CI/CD** pipelines.
* Experience in **Git workflows** and integrating Jenkins pipelines to generate artifacts into **Nexus** repository.
* Configured **Jenkins** master and agent nodes for pipeline execution with integrated tools, ensuring secure **Kubernetes** deployment, while adeptly troubleshooting **GKE** cluster issues to minimize downtime.
* Designed and deployed **OpenStack** environments for **real-time data processing** and **microservices** architecture using **Apache Kafka** and **Spark**. Additionally, implemented **OpenStack** based solutions for **microservices-based** real-time analytics with **Elasticsearch, Logstash and Kibana (ELK).**
* Implemented **Horizontal Pod Autoscaling** in **OpenShift Kubernetes** clusters, optimizing resource utilization and application performance by dynamically adjusting replica pod numbers based on worker node CPU utilization.
* Configured **Jenkins build agents** for improved fault tolerance and redundancy, allowing automatic job rerouting to alternative agents in case of hardware or network failures, ensuring uninterrupted operations with minimal downtime.
* Implemented **blue-green** deployment technique to minimize downtime and mitigate risks during software releases in production environments.
* Integrated **Jenkins** with **PagerDuty** to manage incidents such as build failures and deployment errors, while monitoring resource utilization thresholds through **PagerDuty dashboards**.
* Utilized **Ansible** along with **Nginx** as a reverse proxy server to handle incoming client requests and forward them to appropriate backend servers based on the routing rules created in the **Ansible playbooks**.
* Worked with **Chef Recipes and Ansible playbooks** to ensure minimal downtime, efficient deployment of configurations on the servers and rollback to the old version efficiently across different environments.
* Automated infrastructure creation and server configuration using **Terraform** scripts in **Jenkins** pipelines, ensuring consistent deployment across environments.
* Implemented **Datadog agents** for server log and metric collection, creating dashboards for monitoring and utilized alert policies integrated with **PagerDuty** based on application metrics, logs, and traces.

**Environment:** Open Stack, ELK Stack, Apache Kafka, Google Compute Engine, Google Cloud Firewall Rules, Network policies, Google Cloud Storage, Google Cloud HTTPS Load Balancer, Ingress, GKE, Circle CI, Jenkins, Ansible, Jenkins, Git, Nexus, Terraform, Travis CI, PagerDuty, Datadog, Chef.

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| **Linux System Administrator JAN 2016 - JUL 2017**  **Nisum - Hyderabad, India.** |

* Implemented robust practices to uphold system reliability, security, and performance, overseeing administration, configuration, troubleshooting, and maintenance with proficiency.
* Proficient in managing **VMware vSphere** infrastructure, including **ESXi** hosts, **vCenter** Server, and virtual machines.
* Developed **shell** scripts for automating tasks like **log rotation**, **backup scheduling**, **updates**, saving time and boosting efficiency.
* Designed scripts for analyzing **system logs**, **identifying bottlenecks** and resolving issues swiftly to minimize downtime and optimize performance.
* Utilized **NFS** for centralized storage and file sharing among Linux systems.
* Managed disk space using **LVM** and handled disk space from **NetApp** filers.
* Utilized tools like **tcpdump**, **Wireshark**, **netstat**, and **ping** for **monitoring**, **diagnosing**, and troubleshooting network issues after **patching** and **upgrading** activities.
* Controlled **network traffic** and enforced **security policies** with **iptables** firewall.
* Configured services like **DHCP**, **DNS**, **SSH**, **SFTP, Telnet, RPM Package Management** and **SMTP** using tools like **APT**, **YUM** for seamless functionality and performance.
* Applied patches, installed monitoring tools, and upgraded **BIOS** on **HPC** Clusters. Implemented **LDAP** authentication and authorization for system access and **SSL/TLS** encryption for secure **LDAP** communication.
* Used **Cron** jobs to automate **Docker** environment setup and configuration for testing and DevOps workflows.
* Automated **Linux OS** installation with **kickstart** files and maintained backup solutions for data integrity and disaster recovery readiness.

**Environment: Windows, Linux, RedHat Enterprise Linux, Unix, VMware, SSL/TLS, LDAP, LVM, NFS, DHCP, DNS, Patching, Rebooting, Networking, Firewalls.**