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Description generated with very high confidenceDEEPIKA**

Cloud/DevOps Engineer

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**PROFESSIONAL SUMMARY:**

**Around 7 years of IT expertise in DevOps, CI/CD, Terraform, Build Automation Strategies, Configuration Management, AWS/Azure/Google Cloud Platforms and Implementations**

* Hands-on experience in DevOps methodologies with end to end conﬁguration, software development life cycle, source code management, automation build and deploy operational enhancements in Dev, QA, and Prod environments
* Experience in configuring, automating, managing Infrastructure as a code with **AWS, Azure and Google Cloud** providers
* Handful experience on CI/CD using **Azure DevOps (VSTS)** by handling and monitoring all phases of Build and Deployment activities
* Hands on experience in solutions for Big data using **Hadoop, Spark, HDFS, Hive, Kafka, Elastic search, Zoo keeper**
* Experience in installing and configuring Hadoop ecosystem components and management
* Expertise with implementing automation strategies in infrastructure as code with **Terraform, ARM templates,** **AWS cloud formation templates, Ansible, Docker, PowerShell, Chef and Vagrant**
* Experience in implementing the Azure services such as **Azure Cloud services, Azure storage, Azure Active Directory, Azure Blob Storage, Azure Key vault, Azure virtual networks, Subnets, Network security groups, Azure VMs, Azure VMSS, Azure Site Recovery, Azure Functions, Azure Monitor**
* Experience in creating new Build jobs, plugins installation and management, Test case integration, setting up master/slaves using Jenkins
* Managed **IAM** of **Azure Subscriptions, Azure AD, AD Application Proxy, Azure AD Connect, Azure AD Pass-through Authentication**
* Performed code migrations, merge, and version code for production builds. Manages and maintains migrations between each tool promotion levels and the associated testing or production environment
* Experience on Automating the **CI/CD pipeline** for the Azure cloud-based analytical data migration using **Azure DevOps (VSTS), PowerShell, and GIT** as versioning and controlling tool
* Expertise in AWS infrastructure, architecture, processes, operations, and deployment by utilizing AWS services like **EC2, EBS, S3, VPC, RDS, SES, ELB, IAM, Auto Scaling, Cloud Front, Cloud Formation, Elastic Cache, Cloud Watch, Cloud Trail, SNS, Route 53**
* Experience working with container-based deployments using **Docker, Kubernetes, and Docker Swarm, AWS EKS**
* Expertise in container orchestration using **Kubernetes** by orchestrate, scaling, deployment Docker containers
* Deployed **Kubernetes clusters** on top of Servers using KOPS and managed local deployments in Kubernetes creating local clusters and deploying application containers and building/maintaining docker container clusters managed by Kubernetes and deployed Kubernetes using **helm charts**
* Expertise on **Google Cloud Platform (GCP)** services like **Compute engine, Cloud storage, Cloud load balancing, Cloud SQL, Stack driver monitoring and Cloud deployment manager**
* Experience in provisioning the infrastructure using **Terraform** with Google providers using **GCP service account ID** for different projects.
* Worked on infrastructure setup such as **VMs, Data storage, VPC, IAM, Firewall**. And configuration of
* Experience in providing highly available and fault tolerant applications by utilizing Kubernetes on **Google Cloud Platform(GCP)**
* Experience on monitoring and management of instance groups with the **Google Cloud Monitoring** and worked on application monitoring with **Splunk and AppDynamics** on **Google Cloud Platform (GCP)**
* Worked on building and maintaining the clusters managed by **Kubernetes**, **Docker** on **Google Cloud Platform(GCP)**
* Expertise in configuring, build, deployment and migration of Database Servers with **Azure SQL, my SQL, Oracle DB, Mongo DB, PostgreSQL, DynamoDB and Cassandra**
* Experience in writing **Ansible custom playbooks**, encryption of data by using Ansible Vault, mitigated the role-based access with Ansible tower to manage users, applications, configuration, mount points and packages
* Experience on **Spinnaker** for multi-cloud continuous delivery platform for releasing software changes
* Excellent knowledge in integrating and managing the quality control tools like **SonarQube**, manage the sonar rules, quality gates
* Worked on Build and release of Cloud based products containing Linux and Windows environments, using **Power Shell, TFS and Python Scripting**
* Expertise in Python scripting for writing **Ansible playbooks**, configuring, managing, test on AWS nodes, provisioning development, QA servers
* Experience in writing **Cloud formation templates** for provisioning custom VPC, Subnets, NAT ensuring successful deployment of Web applications, database templates. Also, deployed Secure VPC solutions using Network ACL, Security groups, public and private configurations
* Strong experience with version control Systems like **GIT, CVS, SVN (Subversion), Bit Bucket, Perforce, and IBM Rational Team Concert**
* Experience working with monitoring tools like **Splunk, Nagios, Prometheus, Grafana, Cloud watch, New Relic and Stack Driver**
* Proficient in Networking and configuring **TCP/IP, DNS, NFS, NIS, NIS+, SAMBA, LDAP, SSH, SSL, SFTP, SMTP, SNMP servers**

**SKILL SET:**

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| --- | --- |
| Infrastructure Automation | Terraform, Ansible, AWS CloudFormation, ARM, Chef, Salt Stack, Puppet |
| CI/CD | Azure DevOps, Jenkins, Maven, SonarQube, Packer, Bamboo, JIRA |
| Cloud Platforms | Azure, AWS, OpenStack, GCP, PCF |
| Big Data/Hadoop Technologies | Apache Hadoop, Spark, HDFS, Hive, Cassandra, Elastic search, Kafka, Zookeeper |
| Version Control Tools | Git, GitHub/Bitbucket, Subversion |
| Microservices | Docker, Kubernetes, AWS ECS, DTR, ECR |
| Logging and Alerting | ELK, Splunk, Cloud Watch, Nagios, Grafana, Prometheus, SNS |
| Application Servers and Web Servers | Apache Tomcat, JBOSS, Web Logic, Web Sphere, Nginx, Apache HTTP, SQL Server |
| Operating Systems | Windows, Linux, CentOS, Ubuntu |
| Databases | Oracle DB, Mongo DB, PostgreSQL, MySQL |
| Scripting | Python, Shell, PowerShell, Ruby, Selenium, Groovy, JavaScript |

**PROFESSIONAL EXPERIENCE:**

**Cloud Automation Engineer, May 2020 - present**

**AT&T – Plano, TX**

* Migration of On-Premise data services to Azure with Infrastructure as a Service using **Terraform**
* Configuration and management of build and deployment pipelines with **YAML** (pipeline as a code)
* Provision and manage Azure Paas resources i.e. **Key vault, Function Apps, AKS, Blob Storage, Application Gateway** using automation scripts
* Migration of on-premise data (Oracle/ SQL Server/ MySQL/ MongoDB) to **Azure Data Lake Store (ADLS) using Azure Data Factory (ADF V1/V2)**
* Configure and manage RBAC for users, roles and resources over **Azure Active Directory**
* Automate the Azure Iaas virtual machines and deployed the virtual machine scale sets using the terraform modules in pre-production/production environments
* Deployment and configuration of VMs availability sets for resiliency for the IaaC based solutions using the **Azure Resource Manager**
* Implement data solutions for integration of Azure storages, processing and visualization with monitoring tools
* Manage and monitor **Azure Data Lakes (ADLS) and Azure Data Analytics** integrating with Azure resources
* Team collaboration with application owners, Security Architecture, Application architectures on Infrastructure as a service (Iaas) applications to Platform as a service (Paas) applications
* Utilized azure provider in terraform for deploying custom configured Azure service architecture environment, which is of services like **Subnets, VM’s, Load Balancers, Security Groups, CDN, Monitor, App Service, Functions, Blobs, SQL Databases, Virtual Disks, DNS, Notification Hubs, Queues, Key Vault, Search, AD**
* Developed terraform modules to automate provisioning azure VM’s for application deployment and state files are stored within **Azure Blob Storage**
* Automation of azure resources in multi-platform environment such as Linux and Windows
* Deployment of Azure Functions with application insights for monitoring the applications
* Worked on deployment and configuration of Azure websites, monitoring, analytics and diagnostics for **Compute, Resource groups, Blobs, Azure SQL, Web and Azure Resource Manager** for high availability, auto-scaling and fault tolerance
* Deployment of Look Ahead environment and testing and perform Smoke testing/Sanity testing of Pre-Prod deployed Environments
* Automate deployment processes with python, deploying .Net applications on servers with CI/CD pipelines in Azure, leveraging pipeline as code with **YAML and PowerShell**
* Automate CI/CD pipeline for the Azure cloud-based analytical data migration using **Azure DevOps, Powershell and GIT** as versioning and controlling tool
* Build and deployment of **Docker** containers and orchestration through **Kubernetes** container management tool and manage the docker containers with multiple namespaces using the helm charts
* Used **Azure DevOps (VSTS)** pipelines to build and deploy microservices, create pods, config maps and deployments of helm charts into the **Kubernetes** cluster
* Deployed and configured the **Oracle DB, MySQL DB, Mongo DB, PostgreSQL DB** through the automation scripts using the CI/CD pipelines.
* Install and configure the **Azure Site Recovery and Azure Backup** and enable the Azure Virtual machine backup from the vault.

**ENVIRONMENT:** Azure, Terraform, Agile, GIT, Microsoft Azure, Azure Data Factory (ADF), Kubernetes, YAML, Jenkins, Docker, Ansible, Prometheus, Grafana, Nginx, Nagios, Splunk, Jira, Python, PowerShell Scripting, Linux/Windows

**AWS Cloud Engineer, Sep 2019 – May 2020**

**Verizon – Irving, TX**

* Working on design, development and implementation for data migration of on-premise Hadoop data centre onto **AWS cloud**, setting life cycle policies to back the data from S3 to Glacier, health checks, **Kinesis** for gathering the user input data and logs in the interest of security and export them to S3
* Responsible for designing and implementing the data pipeline using Big Data tools including **Hive, Spark, EC2, ELB, S3 and EMR**
* Used Spark for improving the performance and optimization of the existing jobs in Hadoop using **Spark Core and Spark-SQL**
* Worked on configuration and deployment of the VM instances on **GCP** environments and Data centers
* Experience on building and configuring a GCP virtual data center to support Enterprise Data Warehouse hosting including **Virtual Private Cloud (VPC), Public and Private Subnets, Security Groups, Route Tables, Google Cloud Load Balancing**
* Managed **Helm charts**, reproducible builds of **Kubernetes** applications, managed Kubernetes manifest files, Helm package releases
* Working with **Ansible** for deploying necessary configurations on remote servers and monitoring with Ansible Tower
* Experience on **Jenkins** pipelines to build and deploy microservices onto **Kubernetes cluster of Pods and Docker containers** serving as Master/Slave nodes servers end users
* Working with enterprise grade monitoring **Prometheus and Grafana**, federated Prometheus clusters for multi-cloud clusters and deployments
* Working on architectural design, implementation and support of AWS servers and service solutions in cloud
* Deployed high available and scalable AWS stacks with auto scaling functionality, monitoring and debug with **CloudWatch**
* Work with **AWS RDS** for configuring and managing storages, configured instance backup to AWS **S3 storage bucket** to ensure fault tolerance and high availability
* Developed **terraform** templates leveraging infrastructure as code deploying staging, testing, prod servers
* Designed and developed disaster recovery site and automated provisioning repetitive tasks with **Terraform**
* Automated deployment processes with **Python**, deploying .Net applications on servers with CI/CD pipelines in **Jenkins**, leveraging pipeline as code with **YAML and PowerShell**
* Developed RPA web applications testing scripts with **Selenium** web drivers and **Python Auto GUI** module
* Build scripts using **Maven** build tools in **Jenkins** deployed different web application on to the **Docker**
* Automated cloud deployment process with **Ansible Python API**, developed python modules for Ansible customization, ansible playbooks for continuous delivery process
* Developed **Ansible Playbooks** with Python, SSHas the Wrapper to Manage Configurations of AWS Nodesand Test Playbooks on AWS instances using **Python**
* Developed python scripts for performance monitoring of production environment using **New Relic**
* **Migrated existing AWS cloud architecture to Docker containers** with Docker file configured with required image requirements, managed docker volumes and snapshots
* Configured and virtualized the servers with Docker for dev, test, highly scalable environments Docker coupled with load-balancing **Nginx**
* Worked on **Kubernetes** for automated deployments, scaling and management of containerized applications across Docker clusters
* Deploy **Splunk** systems and monitor internal logs from the monitoring Console, troubleshoot existing or potential issues and resolve the issues
* Create indexes, forwarder and indexer management, **Splunk Field Extractor, Search head Clustering, Indexer clustering, automation scripts save old data into AWS Glacier**
* Create branches and managed the source code for various applications in **GIT**

**ENVIRONMENT:** AWS, GCP, Kubernetes, Jenkins, Docker, Terraform, Ansible, Apache Hadoop, Hive, Spark, EC2, ELB, S3 and EMR, Prometheus, Grafana, Kinesis, New Relic, Nginx, Splunk, GIT, Jira, Python, Ruby, YAML, PowerShell Scripting, Linux/Windows

**DevOps Engineer, Sep 2016 – July 2018**

**United Health Group – Raleigh, NC**

* Designed and deployed a multitude application using **AWS** stack (Including **EC2, Route53, S3, RDS, DynamoDB, SNS, SQS, IAM**) & used **MySQL, DynamoDB and Elastic Cache** to perform basic database administration
* Managed Amazon Web Services infrastructure with automation and configuration management tool **Ansible**
* Created **IAM** policies for roles and users supporting remote applications across the globe, transfer data from Data centers to cloud using AWS import/export service
* Created and implementing application performance monitoring, and logging strategies using **New Relic**
* Designed **AWS Cloud Formation** templates to create custom sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates
* Developed AWS Cloud formation templates for provisioning AWS services like **VPC, subnets, NAT, S3**
* Worked with **Dynamo DB** for database management, **Lambda functions** for database queries, deployed API gateway for entry point of API’s
* Installed RedHat Linux using **Kickstart** and configured security policies for hardening the server based
* Configured **ELK** stack in conjunction with AWS and using **LogStash** to output data to AWS S3
* Configured and managed ELK stack, setup **Elasticsearch ELK Stack** to collect, search and analysis log files from across the servers, evaluated system logs using ELK software stack
* Worked on managing the Infrastructure on **Google cloud Platform** **(GCP)** using various GCP services such as **Compute Engine, Cloud Functions, Cloud DNS, Cloud Storage and SaaS, PaaS and IaaS**
* Experience on maintaining the user accounts **( IAM ), Cloud SQL , Cloud DNS , VPC , RDB and Cloud Datastore** services in **Google Cloud platform**
* Hands-on setting up a **GCP Firewall rules** for to and from traffic to the VM's instances based on specified configuration
* Used **GIT** for source code version control and integrated with **Jenkins** for CI/CD pipeline, code quality tracking and user management with build tools **Maven and Ant**, developed pom.xml build scripts
* Configured and integrated the servers for different environments to automatically provision and configuration management of Linux instances using **Ansible**
* Automated scalable server provisioning and configuration management using **Ansible playbooks**
* Developed automation scripts in **python**, Shell for administration tasks like file system management, process management, backup and restore by creating **Cron jobs**

**ENVIRONMENT:** AWS, GCP, EC2, VPC, Route53, S3, RDS, MySQL, DynamoDB, Cloud formation, Lambda, SNS, SQS, IAM, Auto Scaling groups, New Relic, Jenkins, Ansible, RedHat Linux, Kickstart, LogStash, ELK, GIT, Maven, Ant, Jira, Shell, Python, Ruby, Linux/Windows

**Build and Release Engineer, Jan 2015 – Aug 2016**

**Blue Star Infotech LTD – Mumbai**

* Automated **Jenkins** by setting up commit builds to check for compilation failures of checked-in source code by the developers to accelerate CI
* Deployed java and .net application by developing build scripts in **Maven and Gradle** to build war, jar build artifacts
* Experience 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
* Worked on creating Dockers images with Docker files out of source code and pull the Docker images and run-on Test, Stage, and Production environments
* Worked on deploying **AWS** instances with Security groups, route tables with whitelisting and blacklisting the traffic, ELB, fault tolerant and high available systems, auto scaling for cost cutting
* Configured and Managed **apache web server and Bastian host** by redirecting the public traffic
* Worked with **Jenkins** for continuous integration and deployment integrating **GIT** as a plugin for source code repository for code checkout process, adding storage to the cluster disks and increasing/ decreasing the file system in **RHEL**
* Developed **Groovy scripts** for importing credentials/settings into the **Jenkins** environment using an initialization script and build pipelines

**ENVIRONMENT:** Jenkins, Maven, Gradle, Docker, AWS, Jira, Apache web server, GIT, RHEL, groovy scripting, Linux/Windows

**Linux system administrator, June 2013 – Dec 2014**

**Newgen Software Technologies Ltd – Chennai**

* Installation, integration and management of data backup/recovery solutions. Management and configuration of VMWare machines running **Oracle/Sun Solaris, Red Hat Enterprise Linux and Oracle Linux server**
* Installed and configured servers on **VMware ESX** for various applications via **kickstart, PXE**
* Administration of UNIX servers like **AIX and Sun Solaris** in both test and production environment and applied patches. Created and modified user, groups with sudo permission
* Extensively used **Splunk** for log analysing and monitoring network infrastructure using **Nagios** Generated custom plugins for automating the build activities in QA, Staging and Production environments
* Scheduled and managed **cronjobs, batch processing and job scheduling** using **crontab**, wrote **shell scripts** to automate System Process and troubleshooted with the help of netstat, ping, NS lookup and traceroute tools
* Installed and configured **LAMP** stack (Linux, Apache, MySQL, and PHP) for various new and existing applications
* Troubleshooting Linux network, security related issues, capturing packets using tools such as IP tables, firewall, TCP wrappers, NMAP.
* Maintained **Samba File Server** for user authentication, syslog domain, and file sharing in **Linux/Unix**
* Managed TCP/IP packets & DHCP servers, resolved TCP/IP network access problems for the clients and worked with various **TCP/IP** implementations like **NFSv4, NIS, DNS and DHCP**

**ENVIRONMENT:** RedHat Linux 5/6, SUSE Linux, AIX, Sun Solaris, Splunk, Nagios, Shell, LAMP, Apache, VMware, Kickstart, Oracle, Samba Server, TCP/IP, NFSv4, NIS, DNS, FTP, DHCP

**EDUCATION:**

* Bachelor of Technology in Electronics and Communication, Uttarakhand Technical University, Dehradun, India, 2014
* Master’s in Computer Science, Louisiana State University, Shreveport, LA, USA, 2019