**ABHIRAM PARUCHURI**

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**OVERALL SUMMARY:**

8+ years of experience in the IT Industry with extensive experience in Configuration Management, Continuous Integration, Continuous Deployment, Release Management, and Cloud Implementation proficient in prioritizing and completing tasks promptly, yet flexible to multitask when necessary.

**PROFESSIONAL SUMMARY:**

* Worked on Azure Development **Azure Web Apps**, **Azure App Services**, **Azure Virtual Network**, **Azure SQL Database**, **Azure Fabric controller**, **Azure Search**, **Azure Batch**, **Azure Autoscale**, **Azure Files, Azure Blobs**, **Azure Queues**, **Azure Tables**, **Azure Data Lake Storage**, and **Azure Notification Hub**.
* Expertise in **Azure Scalability** and Azure Availability - Build VMs availability sets using the Azure portal to provide resiliency for **IaaS**-based solutions and **Virtual Machine Scale Sets** (VMSS) using **Azure Resource Manager** (ARM) to manage network traffic.
* Knowledge of **Azure Site Recovery** and **Azure Backup** Installed and Configured the Azure Backup agent and virtual machine backup, Enabled Azure Virtual machine backup from the **Vault**, and configured the **Azure Site Recovery** (ASR).
* Worked on deploying and managing **Azure Kubernetes services**, which deployed **microservices** using **Azure container registry** and **Azure Kubernetes** services by giving authentication deployed microservices into the cluster for scaling and management on **Azure cloud services** and also worked on **Azure Web role**.
* Experience in designing **AWS** Cloud Formation templates to create custom-sized **VPC**, **subnets**, and NAT to ensure successful deployment Of Web applications and database templates and also Good working experience on **AWS Kinesis**. Worked on Multiple **AWS instances**, set the security groups, **Elastic Load Balancer** and **AMI s**, and Auto scaling to design cost-effective, fault-tolerant, and highly available systems.
* Experienced with event-driven and worked on **AWS** Lambda functions to trigger various **AWS** resources and Managed security groups on AWS focusing on high availability, **fault-tolerance**, and auto-scaling using **terraform** templates. Along with Continuous Integration and Continuous Deployment with **AWS Lambda** and **code pipeline**.
* Experience with **AWS IAM** service in creating **IAM** roles for users and groups, defining roles and policies and Identity providers And also using them to restrict access to certain buckets from certain persons, and experience in setting up and managing **ELK Stack** to collect and integrate with **AWS CloudWatch**.
* Worked with Container based technologies like **Kubernetes**, and **OpenShift** along with the development of **Microservices** architecture using **Spring Boot** including distributed SSO Authentication and Authorization
* Experience in building and deploying the application code using **Kubernetes CLI** i.e., **kubectl**, **kubelet**, **kubeadm**, and scheduling the jobs using **Kube scheduler**. Managed K8s charts using **Helm** and created reproducible builds of the **Kubernetes** applications.
* Expertise in using **Docker** to Ship, Run and Deploy the application securely to fasten the **Build/Release** Engineering. Virtualized the servers using **Docker** for the test environments and devenvironment needs.
* Experience in Implementation of **Docker** and Various **Docker Orchestration** tools such as **dockercompose**, **docker-swarm**, and **docker trusted registry (DTR).**
* Experience in working with **Terraform**, **Infrastructure as code**, **executing designs**, **Resource Graphs**, change Automation, converting existing **Terraform** modules that had version conflicts to utilize cloud formation during terraform deployments and integrating various Terraform templates to create infrastructure for various applications.
* Implemented in writing **Terraform scripts**, performing validation, and deploying and managing **AZURE cloud infrastructure** and involved in setting up **Terraform** continuous build integration system
* Expertise in Monitoring and **Log Analytics tools** such as **Nagios, Splunk, ELK X-Pack stack, Grafana,** and **Gray-Log**. Used **SonarQube** in build system for continuously inspecting the code quality, **Nagios** for monitoring and performed log analysis using **ELK** stack and created monitoring charts.
* Expertise in automating **Jenkins** to build code based on **Ruby, YAML, Python, Shell, PowerShell, JSON, PHP**, and **Perl** triggered from **GitHub** to run web applications on **AWS Elastic** Beanstalk including **EC2** build server for continuous delivery with less failover.
* Strong knowledge of **Ansible Roles**, inventory, **Ansible Tower**, and **Ansible Galaxy** concepts and used **Ansible Control Server** to deploy plays and playbooks to the machines and systems in the inventory.
* Responsible for extracting logs from **GIT** using Python and performed data cleaning using **regex** to generate the Change logs for comparing different software versions, also used **Python** scripts for security purposes.
* Experience in Administrating various flavors of **Linux** (**RHEL, CentOS, Ubuntu, Solaris, Ubuntu, Fedora**) and worked on **Logical Volume Manager (LVM)**, **Veritas Volume Manager**, Kickstart, Bonding, **LAMP, and LDAP**.
* Expertise in Network Management skills like **DNS, NIS, NFS, LDAP, FTP, SSL, SSH, HTTPS, SFTP, TFTP**, and system troubleshooting skills.
* Proficient in installing, configuring, and tuning **Database Servers (SQL Server, Oracle, PostgreSQL, MongoDB, DynamoDB)** Maintained and Performed required DB tasks.
* Experienced in **UNIX** System Administration, working on server-based operating systems and kernel configurations on **Redhat Linux, CentOS, SUSE, Debian 7, Ubuntu 12.x/13.x** in a DevOps Environment with CI/CD as an Iterative process, proficient with Package management **YUM & RPM for RHEL/CentOS**.
* Well-versed with **Software development life cycle (SDLC)**, **Test life cycle (STLC)**, and Bug life cycle and worked with testing methodologies like the **waterfall** and **agile methodology (SCRUM)**.
* Worked on **Build & Release** for platforms like **Java, .Net & NodeJS**.

**TECHNICAL SKILLS:**

**Cloud Technologies:** AZURE, AWS & Open Stack

**Operating Systems:** Ubuntu, RHEL, CentOS, Linux, Windows.

**Configuration and Infrastructure Management Tools:** Terraform, Ansible, Puppet, Maven.

**Automation Tools**: GitLab, GitHub, Jenkins, Bamboo.

**Ticketing Tools**: Jira, ServiceNow

**Containerization:** Docker, Docker Swarm, Kubernetes.

**Scripting Languages:** Bash, Python, JSON, Ruby, YAML, Power Shell, Go.

**Web Servers:** Web Logic, Apache Tomcat, NGINX, JBoss, WebSphere.

**Monitoring Tools:** Splunk, Nagios, Cloud Watch, ELK, App Dynamics.

**Databases:** MySQL, SQL Server, MongoDB, DynamoDB.

**Repository Management:** JFrog, Nexus Artifactory.

**Network Protocols:** TCP/IP, DHCP, DNS, SNMP, SMTP, Ethernet, NFS, NAS, SAMBA.

**CERTIFICATION LINKS:**

[**MICROSOFT CERTIFIED: AZURE ADMINISTRATOR ASSOCIATE**](https://www.credly.com/badges/97ae4a9b-e1b4-4cb7-9d4e-3cc90f3843bb/public_url)

[**MICROSOFT CERTIFIED: DEVOPS ENGINEER EXPERT**](https://www.credly.com/badges/3f6e598b-bb8c-4682-ad10-3592346a7ad5/public_url)

[**DESIGNING AND IMPLEMENTING MICROSOFT DEVOPS SOLUTIONS**](https://www.credly.com/badges/ebbe5661-fff3-4c52-8b5d-9807687421a9/public_url)

[**CKA: CERTIFIED KUBERNETES ADMINISTRATOR**](https://www.credly.com/badges/445ec388-f552-4bdd-8946-b6f6d1b7b7a9/public_url)

**PROFESSIONAL EXPERIENCE**

**Client:** Markel InsuranceSep 2022-Present

# **Role:** DevOps Engineer

**Location:** Richmond, VA(On-site)

**Key Responsibilities:**

* Deployed **Azure Cloud services** (PaaS role instances) into secure **VNets**, and **subnets** and designed **Network Security Groups (NSGs)** to control Inbound & Outbound access to **Network Interfaces (NICs)**, VMs & subnets.
* Managed **Data Bricks** Applications and deployed respective jobs to different environments.
* Automated Pipelines to **YAML** from the classic model which eliminated the human intervention.
* Implement different strategies to reduce the cost of the resource groups in day-to-day operations.
* Managed **Azure automated assets**, **Graphical runbooks**, and **PowerShell run books** that will automate specific tasks. Worked on deploying **Azure AD Connect**, and configuring **ADFS** installation using **Azure AD** connect.
* Working with cross-functional teams to deploy **the Azure Data Factory**, **Azure Function Apps,** and **Azure Logic Apps**
* Deploying **IAC** by using **Terraform.** Standardizing the code, and streamlining the use of the DevOps implementation in the organization.
* Expertise in Azure infrastructure management (**Azure Web Roles, Worker Roles, SQL Azure, Azure Storage & Azure AD Licenses**).
* Coordinate with vendors like **Atlassian**, and **JFrog** to review system information, troubleshoot Level 1 to Level 3 issues, reports bugs, and submit improvements.
* Used **Terraform** to create, change, and improve production infrastructure and maintained versioning infrastructure safely and efficiently by custom in-house solutions
* Managed **Azure Infrastructure**, **Azure Web Roles**, **Worker Roles**, **SQL Azure**, **Azure Storage**, **Azure AD Licenses**, Virtual Machine Backup and Recover from a **Recovery Services Vault** using **Azure PowerShell** and Portal.

**Client:** FedExAug 2021-Aug 2022

# **Role:** Cloud DevOps Engineer

**Location:** Pittsburgh, PA

**Key Responsibilities:**

* Proficient in Microsoft **Azure IAAS**, **SAAS**, and **PAAS** services such as **Azure Data Factory**, **Cloud Services**, **Resource Groups**, **Express Route**, **Traffic Manager**, **VPN**, **Load Balancing**, **Application Gateways**, Auto-Scaling, deploying **Web Apps**, monitoring by **Azure Application Insights** and creating **Web-Jobs.**
* Implemented **Azure AD** using **AD connect**, configured **SSO**, and multifactor Authentication. Implemented and managed **AD synchronization**.
* Created **gateways** for **Virtual Network** to **Virtual Network** and Site to Site-specific **VPN** connectivity on **Azure environments** and worked on creating and managing **Virtual Machine** in Windows Azure and setting up communication with the help of **Endpoints**.
* Expertise in Azure infrastructure management (**Azure Web Roles, Worker Roles, SQL Azure, Azure Storage & Azure AD Licenses**).
* Deployed **Azure Cloud services** (PaaS role instances) into secure **VNets**, and **subnets** and designed **Network Security Groups (NSGs)** to control Inbound & Outbound access to **Network Interfaces (NICs)**, VMs & subnets.
* Responsible for implementing containerized based applications on **Azure Kubernetes** by using **Azure Kubernetes Service (AKS),** **Kubernetes Cluster**, which are responsible for cluster management, **Virtual Network** to deploy **agent nodes**, **Ingress API Gateway**, **MySQL Databases**, and **Cosmo DB** for **stateless storage** of external data, and set up reverse proxy **Nginx** in the cluster.
* Deployed and optimized two-tier **Java**, and **Python** web applications to **Azure DevOps** CI/CD to focus on development by using services such as Repos to commit codes, Test Plans to unit test, deploy **App Service**, **Azure Application Insight** collects health performance and usage data of the process, stored **artifacts** in **blob storages**.
* Managed **Azure Infrastructure**, **Azure Web Roles**, **Worker Roles**, **SQL Azure**, **Azure Storage**, **Azure AD Licenses**, Virtual Machine Backup and Recover from a **Recovery Services Vault** using **Azure PowerShell** and Portal.
* Implemented **Docker Swarm** to deploy **load balance**, **scale**, and **manage docker** containers with multiple name-spaced versions and integrated Cluster Management with **Docker Engine** using **Docker Swarm**.
* Managed **Azure Container Registry** to store private **Docker** images, which are deployed, and **Azure pipelines** to build, test, and deploy. **Azure Monitor** to collect metrics and logs. Configured Monitor to track performance and maintain security, and used **Splunk** tool to collect metrics, and queries.
* Implemented **Kubernetes** for **Docker** container orchestration. Managed **Kubernetes charts** using **Helm** and created reproducible builds of the **Kubernetes** applications, templatize **Kubernetes manifests**, provide a set of configuration parameters to customize the deployment, and Managed releases of **Helm** packages.
* Implemented **Jenkins** pipelines into **Azure pipelines** to drive all **microservices** builds out to the **Docker registry** and then deployed to **Kubernetes**, Created Pods, and managed using **AKS**.
* Developed **Ansible** playbooks, inventories, and custom playbooks in **YAML** encrypted the data using **Ansible Vault** and maintained role-based access control by using **Ansible Tower** and implemented IT orchestration using **Ansible** to run tasks in a sequence that can work on different servers.
* Working with **Ansible** tower to manage **Web Applications**, **Config Files**, **Data Base**, **Commands**, User Mount Points, Packages, and for running playbooks stream in real-time and amazed to see the status of every running job without any further reloads.
* Used **Terraform** to create, change, and improve production infrastructure and maintained versioning infrastructure safely and efficiently by custom in-house solutions
* Working on **Splunk** tool for monitoring all the **Kubernetes** clusters for efficient cluster visibility, proactive monitoring, and triggering action.
* Developed Build and Deployment Scripts using build tools **MS Build**, and **Maven** in **Jenkins** to migrate from one environment to another environment and utilized **Nexus**, **Maven**, and **SonarQube**.
* Automated Installation and configuration of **Apache**, and **Tomcat** servers using **Python** and supported implementations of Kafka and RabbitMQ message servers running Linux and Windows servers.
* Implemented relational Databases, and **NoSQL** Database Management systems like **MySQL, MSSQL, Oracle, PostgreSQL**, **Cassandra**, **CouchDB**, and **Mongo DB**.
* Coordinate with vendors like **Atlassian**, and **JFrog** to review system information, troubleshoot Level 1 to Level 3 issues, reports bugs, and submit improvements.

**Client**: ClarioJun2019-Jul2021

# **Role**: Cloud DevOps Engineer

**Location:** India

**Key Responsibilities**

* Worked on **Microsoft Azure** (Public) Cloud to provide **IaaS** support to the client. Set up Automation to create Virtual Machines through **Power Shell** Script and **Azure Portal**, Created and managed **Storage** Account and **Affinity Group** in **Azure Portal**.
* Migrating on-premises web application to **Azure Pipelines** by utilizing **ARM** templates, **VPN** gateway, site-to-site **IPSec/IKE VPN**, **DNS** server Firewall, and Application Gateway
* Created **Azure automated assets**, **Graphical runbooks**, and **PowerShell run books** that will automate specific tasks. Worked on deploying **Azure AD Connect**, and configuring **ADFS** installation using **Azure AD** connect.
* Worked on **Azure ExpressRoute** to establish a connection from Azure to the On-premise datacenter. Working knowledge of **Azure Fabric**, **Microservices**, and **Docker** containers in **Azure** and **Azure DevOps**.
* Automated a portfolio of scripts using the **Azure** automation tool. Created ad hoc scripts to add virtual machines using Desired State configuration tool. Provided real-time predictions by using **Azure Stream Analytics** and used **Azure IOT Hub** for Monitoring Assets and Telemetry Ingestion.
* Configured the **Kubernetes** provider with an office that is used to interact with resources supported by Kubernetes to create several services such as **Demon sets**, **Scale full sets**, **Config Map**, **Namespace**, **Volume**, and **Auto scaler**.
* Created **Tekton** pipelines in **Kubernetes** which were leveraged by developers to create and deploy images, and perform easier rollbacks
* Worked on Docker set up for all the groups in the company, created new docker images to create the required containers, and pulled existing images from Docker Hub. Created, managed, and updated the Docker Containers for deploying the applications in different environments.
* Worked on container-based deployments using the **Docker** images and **Docker registries**, pulled the required images from **Docker Hub**. Used Docker for avoiding the environmental difficulties between Developers and Production.
* Worked on **Docker** containers and **Kubernetes** on multiple clouds and helped to bridge the gap between developers and operations by providing the same environment with the help of **Docker** and **Kubernetes**.
* Built and managed the Docker container clusters managed by **Kubernetes**, using Kubernetes and Docker for the runtime environment of the **CI/CD** system to build, test and deploy the code.
* Configured **Jenkins** master and slave nodes for continuous integration, created jobs, configured **Git** repositories, **SonarQube** for code test.
* Developed **CI/CD Jenkins** pipeline to **AKS** clusters for automating routine tasks.
* Build automation using **Jenkins** server, Install and configuration of **Jenkins**, configure plugins, job setup, and build pipeline and delivery pipeline views. Deployed and troubleshoot various Jenkins issues. Installed and uninstalled, upgraded and downgraded various plugins in Jenkins
* Written the **Ansible** playbooks which are the entry point for Ansible provisioning. Where the automation is defined through tasks using **YAML** format to set up a continuous delivery pipeline and run **Ansible Scripts** to provision Dev servers.
* Used **Ansible** for configuration management, creating the inventories to define the group of hosts for different groups like Dev, Test, Pre-Prod, and Prod and configured the requirements, and used **Ansible Vault** for securing the sensitive data.
* Implemented **Terraform** templates automating **Azure IAASs** VM’s using terraform modules and deployed virtual machine scale sets in a production environment
* Configured continuous integration from Source control, set up build definition within Visual Studio Team Services (VSTS), and configure continuous delivery to automate the deployment of **ASP.NET MVC** applications to **Azure web apps**.
* Involved in combining all Release pipelines into a Single Release pipeline. We used **AZURE DevOps**, **VSTS & PCF**. Managing keys by creating the keys and attaching them to library & Variable Groups with the help of **Key Vault**

# **Client:** American Electric Power Nov2018-May 2019

# **Role:** DevOps Engineer

**Location:** India

**Key Responsibilities:**

* Worked on building a Serverless application using **AWS API** Gateway and **Lambda** function.
* Integration of automated build and release pipeline for **NodeJS** application using **Azure DevOps**.
* Developed, debugged, and tested **Shell** scripts to automate the creation of **AWS API** Gateway and deploy the **lambda** functions, reducing the man hours of this process by 75% and increasing the accuracy significantly.
* Worked on Amazon **AWS** tools and assisted in building the infrastructure for various **web applications**, assisting with documentation and **security assessment**.
* Experience in creating User/Group Accounts and attaching policies to User/Group Accounts using **AWS IAM** service.

Setting up databases in **AWS** using **RDS**, storage using **S3 bucket**, and configuring instance backups to **S3 bucket**.

* Orchestrated provisioning, monitoring, dynamic configuration, load balancing, and optimization of servers in a cloud environment.
* Created **terraform** templates for provisioning virtual networks, VM Scale sets, Load balancers, and **NAT** rules and used **terraform** graph to visualize execution plan using the graph command. Used Terraform to deploy the infrastructure necessary to create development, test, and production environments for software development projects.
* Maintained and fixed bugs for existing applications and infrastructure.
* Build **CI/CD** pipelines with **Jenkins**, and **Maven** and use **Git** as source code version control.
* Familiarized with **Docker** and **Kubernetes**.
* Experience in using configuration management tools like **Ansible**.
* Used **JIRA** to assign tickets, updated the status, and the story of the tickets as per the sprint setup, and relied upon Confluence for documenting the progress of Projects and Sprints.

**Client:** Channel SoftJun 2016- Oct 2018

## **Role:** Build & Release Engineer

**Location: India**

**Key Responsibilities:**

* Administered **RedHat Linux 4.x/5** servers for several functions including managing **Apache Tomcat Server**, **Mail Server, MySQL database**, and **Firewalls** in both development and production environments.
* Configured **Bamboo** plugins to pull code from **Bitbucket** and created a pipeline process where the code is built immediately after pulling by using build tools like Maven and after creating the artifacts deployed into repositories **Jfrog Artiactory**.
* Installing **Bitbucket** Data Centre on-premise to merge the existing **Bitbucket** servers of individual companies in the organization to one source of platform for code repositories.
* Developing and maintaining the built environment, the source code control system, and managing build packages using **GIT** and **GitHub.**
* Worked on Branching, Tagging, and **Release Activities** on Version Control Tools (GIT) and Setting up the GIT repos for Bamboo build jobs.
* Worked with **MAVEN** for building the application, has written **MAVEN** scripts and **Python**, and Shell scripts to automate the build process.
* Maintained build-related scripts developed in shell for Maven builds. Created and modified build configuration files including **POM.xml**.
* Developed build and deployment scripts using **MAVEN** as build tools in **Bamboo** to move from one environment to other environments. For the check-in process used **Tortoise SVN** as a migration tool. Involved in migration of the **Bamboo server**, Art factory, Perforce & GIT server.
* Involved in Setting up the backup server for **Bamboo** and prepared disaster recovery plans for bamboo.
* Setting up continuous integration and formal builds using Bamboo with **Artifactory** repository.
* Resolved update, merge and password authentication issues in Bamboo and **JIRA**.
* Installed and configured an automated tool **PUPPET** that includes the installation and configuration of the puppet master, agent nodes, and an admin control workstation.

Managed **Puppet** Enterprise for improvements to the **Puppet** Development Workflow that supports Unit Testing and Acceptance Testing for individual Puppet Modules. The New Development workflow uses different open source tools like **Server Spec, Rspec, Vagrant**, and **Packer** to validate changes across different Puppet modules.

* Involved in developing the ruby scripts for **Puppet** and creating Puppet modules to automate system deployment to scale infrastructure.
* Designed and developed various modules of the application with **J2EE** design architecture, Spring MVC architecture using IOC and for dependency injection, and used Spring Batch for scheduling and maintaining batch jobs
* Designed and developed **SOAP** web services that support **XML** for other developers to access to speed up development
* Working closely with Web Administrators to understand, participate, and experience the technical architecture for web servers such as **Apache, JBoss, WebSphere, and WebLogic** and deploying **J2EE** Applications to these environments
* Maintained JIRA for tracking and updating project defects and tasks. Managed and documented all post-deployment issues utilizing the Post Deployments Issue Log.
* Kept information organized and accessible with a flexible page hierarchy using **Atlassian** Confluence pages
* Proficient in installation and configuration of various Packages and Patches in Linux utilizing **Red Hat Satellite** Server
* Worked on implementation and troubleshooting of network services like **NFS, FTP, NTP, Telnet**, and **SSH**.

**Client:** Value Labs  (Feb 2014- May 2016)

## **Role:** Unix/Linux Administrator

**Location:** India

**Key Responsibilities:**

* Installed, upgraded, and configured **RHEL(Red Hat Enterprise Linux 5 and 6), CentOS, Ubuntu**, and **Solaris**.
* Configured CPU, memory, and disk partitions as required.
* Monitored creating and managing user accounts, **security**, **Access Control** lists, permissions, **disk space**, and process monitoring in **RHEL**.
* Installed and configured **Apache** and supported them on Linux production servers.
* Performed software package installation, upgrades, and updates using **yum** and **rpm** commands.
* Involved in troubleshooting production servers and configuring standalone production servers for testing.
* Installation, Configuration, and Administration of **Web Logic**, **WebSphere**, and **Apache Servers** in Linux and **Solaris** Servers.
* Expertise in troubleshooting the systems and managing **LDAP, DNS, DHCP**, and **NIS**.
* Involved in developing dynamic web-based user interfaces using **HTML** and **JavaScript**.
* Hands-on experience working with production servers at multiple data centers.
* Configured yum repository server for installing packages from a centralized server.
* Installed and configured **DCHP** server in Linux to give IP leases to production servers.
* Performed Kernel tuning with the sysctl, and **Disk management** with the help of **LVM**.

Managing User Administration - Creating users and groups, modifying, and deleting user accounts/groups, and managing permissions.

* Password-less setup and agent-forwarding done for **SSH** login using ssh-keygen tool.
* Established and maintained network users, user environment, directories, and security.
* Configuration and Administration of Apache Web Server and **Secure Socket Layer** (SSL).
* Backup management using **CRONTAB**, running the backup based on client requirements.