**Bindu Prada**

**Mobile No: +1-972-988-9379 | Email:** [**Binduvardhan.az@outlook.com**](mailto:Binduvardhan.az@outlook.com)

<https://www.linkedin.com/in/bindu-prada-0876041ab/>

**SUMMARY:**

* I’m a Certified Senior DevOps Engineer with over 13+ years of real-time experience, working across Azure, AWS, and GCP to build, manage, and scale secure, high-performing cloud infrastructure. I've worked hands-on with Terraform, Azure Bicep, and AWS CDK to automate everything from VM provisioning to Kubernetes clusters, ensuring speed and consistency across multiple environments.
* I design and implement CI/CD pipelines using Azure DevOps, GitHub Actions, Jenkins, and ArgoCD—enabling smooth deployments, automated testing, and rollback strategies for mission-critical applications. I’ve managed Helm-based Kubernetes deployments, built multi-tenant clusters, implemented Istio service mesh for traffic control, and integrated Vault and OPA for secure secrets and policy enforcement.
* Monitoring and alerting aren’t just tools for me—they're lifelines. I've set up end-to-end observability using Prometheus, Grafana, Loki, and OpenTelemetry—even integrating Jaeger for distributed tracing across microservices. This reduced our mean time to resolution by 40% in high-pressure environments.
* Security is always on my radar. I integrate tools like Trivy, Checkov, and Aqua Security into our pipelines to ensure every deployment meets compliance and security benchmarks. I’ve also helped teams adopt DevSecOps practices without slowing down the development velocity.
* Whether its provisioning environments using Terraform workspaces, building self-healing infra with auto-scaling, or configuring blue green / canary deployments, I focus on solutions that are clean, reusable, and resilient.
* I’ve worked with Fortune 500 clients in Healthcare, Retail, Telecom, Pharma, and Finance, directly collaborating with developers, architects, and business teams to align tech with business goals. My goal is simple: deliver reliable infrastructure and fast, safe deployments—every time.
* Designed and automated complete Azure and AWS infrastructure using Terraform and Azure Bicep, including VNets, subnets, AKS clusters, and Key Vault integrations for multiple environments like Dev, QA, and Prod.
* Built secure, scalable CI/CD pipelines using Azure DevOps YAML, GitHub Actions, and Jenkins, enabling auto-triggered builds, testing, security scans, and multi-environment deployments with rollback strategies.
* Containerized Java and .NET applications using Docker, created custom base images, and deployed them into Kubernetes (AKS, EKS) using Helm charts, with autoscaling and Ingress setup.
* Implemented GitOps-based deployment workflows using ArgoCD and Flux, where Git was the single source of truth, ensuring environment consistency and enabling version-controlled rollbacks.
* Set up centralized monitoring with Prometheus, Grafana, and Loki, built dashboards for pod metrics, latency, and error rates, and configured alerts integrated with Slack and PagerDuty.
* Managed secrets and sensitive configurations using HashiCorp Vault, Azure Key Vault, and Kubernetes Secrets, integrated with CI/CD pipelines and service accounts for secure runtime access.
* Created reusable Terraform modules for networking, compute, and storage, and implemented remote state management with locking to prevent parallel conflicts in multi-team environments.
* Handled production support using kubectl, checked pod logs, resolved CrashLoopBackOff errors, managed service restarts, and applied real-time patches during high-priority incidents.
* Enabled distributed tracing for microservices using OpenTelemetry and Jaeger, which allowed pinpointing of bottlenecks across service chains and improved overall system observability.
* Delivered blue-green and canary deployment strategies using Argo Rollouts, ensuring near-zero downtime, and safe feature exposure by monitoring live traffic behavior before full rollout.
* Configured observability with Azure Monitor, Application Insights, and Log Analytics, and set up custom alerts and queries for live production health checks and deployment validations.
* Worked closely with developers, testers, and architects during Agile sprints, took ownership of infrastructure tickets, participated in planning meetings, and resolved blockers before release cutoffs.
* Managed stateful Kubernetes deployments using PVCs, Storage Classes, and affinity rules, supporting services like MongoDB, Redis, and Elasticsearch with persistent storage needs.
* Led and documented production releases, coordinated change windows, performed smoke tests post-deployment, and maintained Confluence pages for release runbooks and infra diagrams.
* Engineered cross-cloud Kubernetes cluster provisioning using Terraform and Azure Bicep, integrating workload identity federation and automated network policies to securely isolate microservices. Configured DNS, ingress controllers, and persistent volumes to ensure production readiness across AKS and GKE.

**TECHNICAL SKILLS:**

* **Cloud Platforms:** AZURE (AKS, ACR, App Gateway, Azure Monitor, Application Insights, Key Vault, Bicep, ARC), AWS (EC2, VPC, S3, IAM, ELB, Route 53, RDS, CloudWatch, CDK), GCP (GKE, Cloud Storage, IAM)
* I**nfrastructure as Code (IaC):** Terraform, Azure Bicep, AWS CDK, ARM Templates, CloudFormation
* **CI/CD & DevOps Pipelines:** AZURE DevOps (YAML), GitHub Actions, Jenkins, Spinnaker, Tektone, Bitbucket Pipelines
* **Version Control & GitOps:** Git, GitHub, GitLab, Bitbucket, ArgoCD, FluxCD
* **Containerization & Orchestration:** Docker, Kubernetes (AKS, EKS, GKE, self-managed), Helm 3, Kustomize, Istio, Linkerd
* **Monitoring & Observability:** Prometheus, Grafana, Loki, OpenTelemetry, Jaeger, Azure Log Analytics, App Insights, Nagios, Datadog
* **DevSecOps & Compliance:** Trivy, Checkov, Aqua Security, Snyk, OPA (Open Policy Agent), Vault, TFSec, SonarQube
* **Scripting & Automation:** Shell Scripting (Bash), PowerShell, Python (Infra Automation), Ansible, Packer
* **Build Tools:** Maven, Gradle, Ant
* **Artifact Repositories:** AZURE Artifacts, JFrog Artifactory, Nexus
* **Project & Ticketing Tools:** JIRA, Confluence, ServiceNow
* **Operating Systems:** Linux (Ubuntu, RHEL, CentOS), Windows Server
* **Other Tools & Technologies:** KubeCTL, YAML, JSON, REST APIs, SSL/TLS, DNS, RBAC, Active Directory, SSH, NGINX, Apache, VMware

**Education**

**Bachelors in Science- 2006**

**University Name: Sri Krishnadevaraya University**

**MCA - 2009**

**GATES Institute of Technology**

**Certifications:**

* Certificated AZ-900 - Microsoft Azure Fundamental Technologies.
* Certificated AZ-301 - Microsoft Azure Administrator Associate.
* Certified Kubernetes Administrator (CKA).
* Certified Az- 70-533 Microsoft Certified Solutions Associate (MCSA).
* Certified Terraform Associate from HashiCorp.

**Experience:**

### **Project:** **Enterprise DevOps Automation for Claims & Member Management Systems**

**Company:** **Cognizant (Remote / NJ)**  
**Role:** **Senior DevOps (Azure/GCP) Engineer**  
**Client:** **Elevance Health – Healthcare Domain**  
**Duration:** **Dec 2023 – Present**

### **Key Responsibilities:**

* Automated Azure and GCP infrastructure provisioning using Terraform and Azure Bicep, creating reusable modules for AKS, VNets, subnets, NAT gateways, App Gateway, and Key Vault across environments.
* Built and maintained CI/CD pipelines in Azure DevOps and GitHub Actions, integrating SonarQube, Trivy, Helm, and integration testing into the pipeline for secure and accelerated releases.
* Deployed applications to AKS using Helm charts, handling config management, volume mounts, secrets, autoscaling, and health checks for high availability.
* Implemented GitOps workflows with ArgoCD for AKS, enabling deployment syncs, rollbacks, and audit tracking from Git repositories.
* Configured centralized secrets management with Vault and Azure Key Vault, replacing plaintext secrets with dynamic tokens and enabling automated key rotation.
* Set up observability using Prometheus, Grafana, and Loki, building dashboards for API latency, pod health, and resource metrics.
* Enabled distributed tracing using OpenTelemetry and Jaeger for Java-based microservices, helping teams track latency and resolve performance bottlenecks.
* Integrated DevSecOps tools like Checkov, Trivy, and Aqua Security in pipelines to scan IaC templates, container images, and libraries with enforced quality gates.
* Resolved production issues using kubectl, inspecting logs, analyzing rollouts, and handling errors like CrashLoopBackOff and image pull failures.
* Designed blue-green and canary deployment strategies using Argo Rollouts, configuring traffic shifting, health checks, and rollback rules for safe releases.
* Created reusable Terraform modules for compute, networking, and security, and managed them in a shared internal registry for faster provisioning.
* Configured monitoring with Azure Monitor, Application Insights, and Log Analytics, writing KQL queries and setting up alerts integrated with Slack and PagerDuty.
* Managed pipeline promotions across DEV, QA, UAT, and PROD using variable groups, templates, approvals, and rollback policies.
* Participated in Agile ceremonies including daily stand-ups, sprint planning, and release demos, coordinating with developers, QA, and product owners.
* Led production deployments, coordinated change approvals, validated DNS/SSL, monitored telemetry, and documented releases in Confluence.

### **Key Projects:**

### **Cloud-Native Infrastructure Automation**

* Developed a reusable, production-grade infrastructure-as-code framework using Terraform and Azure Bicep for provisioning AKS, App Gateway, Key Vault, and VNet resources. This framework is now standardized across all Elevance Health application teams for rapid and secure environment setup.

**GitOps-Driven Kubernetes Deployment**

* Implemented end-to-end GitOps pipelines using ArgoCD integrated with Helm, enabling automated, version-controlled deployment of critical microservices into Azure Kubernetes Service (AKS). This significantly reduced manual deployment errors and improved auditability.

**End-to-End Observability Enablement**

* Designed and deployed centralized monitoring and alerting using Prometheus, Grafana, Loki, OpenTelemetry, and Jaeger. Built custom dashboards and integrated alerts with Slack and PagerDuty, enabling real-time visibility and faster incident resolution.

**DevSecOps Pipeline Enhancement**

* Enhanced CI/CD workflows using Azure DevOps and GitHub Actions by integrating Trivy, Checkov, and Aqua Security for vulnerability scanning of IaC and container images, ensuring compliance with healthcare security standards like HIPAA.

**Secure Secrets & Compliance Management**

* Established enterprise-grade secrets management by integrating HashiCorp Vault and Azure Key Vault with both pipelines and Kubernetes workloads. This approach enforced zero-secrets-in-code and automated key rotation, aligning with strict compliance mandates.

**Tools & Technologies Used:** **Azure (AKS, ACR, App Gateway, Azure DevOps, Key Vault, Monitor), GCP (GKE, Cloud Build), Terraform, Azure Bicep, ArgoCD, GitHub Actions, Jenkins, Docker, Kubernetes, Helm, Prometheus, Grafana, Loki, Vault, OpenTelemetry, Jaeger, OPA, Trivy, Checkov, Aqua Security, Bitbucket, JIRA, Slack**

### **Project: Cloud DevOps Enablement for Multi-Tenant Application Deployments**

### **Company: Deloitte**

### **Role: Senior DevOps (Azure/GCP) Consultant Client: Cisco (Telecom), Kroger (Retail) Duration: Feb 2021 – July 2023**

### **Key Responsibilities:**

* Automated infrastructure provisioning across Azure and GCP using Terraform, building multi-environment templates to deploy AKS, GKE, App Gateways, firewall rules, and load balancers.
* Developed secure and scalable CI/CD pipelines using Azure DevOps, Jenkins, and GitHub Actions, integrating code quality checks, image scans, and release approvals.
* Deployed containerized applications using Docker and managed Kubernetes deployments in AKS and GKE clusters using Helm charts and Kustomize, with support for autoscaling and multi-zone availability.
* Implemented GitOps-based delivery model using ArgoCD and Flux, automating application rollouts across staging and production clusters for both Cisco telecom services and Kroger retail systems.
* Configured centralized logging and monitoring using Prometheus, Grafana, and Log Analytics, setting up custom dashboards and alerts based on client-specific SLAs.
* Managed secure secrets lifecycle by integrating HashiCorp Vault with Kubernetes and pipelines, enforcing dynamic secrets, access policies, and rotation schedules.
* Integrated Aqua Security and Trivy into CI/CD workflows to perform container image scanning and block deployments with critical vulnerabilities.
* Wrote Ansible playbooks to automate OS-level configuration and provisioning tasks for backend services and middleware stacks.
* Troubleshot real-time issues using kubectl, Helm, and monitoring tools, supporting production environments with high SLA requirements, including incident response and postmortem documentation.
* Designed and implemented canary and blue-green deployment strategies using Argo Rollouts and custom validation scripts, improving release safety and reducing downtime.
* Defined branching strategies, managed Bitbucket and GitHub repos, and coordinated code merges, pull request reviews, and release tagging across multiple teams.
* Built Terraform remote state management strategy with state locking for collaborative deployment across departments, ensuring infra consistency and versioning.
* Created knowledge base documentation, authored Confluence runbooks, and hosted infra onboarding sessions for developers and junior engineers.
* Led weekly release coordination meetings, interfaced with QA, testing, security, and change management teams to ensure timely and compliant production pushes.
* Supported ticket resolution workflows via JIRA and ServiceNow, tracked issues across CI failures, release failures, or production incidents, and documented fixes for RCA.

### **Key Projects:**

### **🔹 Cisco Cloud Delivery Platform (Telecom)**

* Built a scalable, automated CI/CD platform to support 50+ microservices deployed across GKE and AKS clusters using GitOps, Terraform, and ArgoCD, improving deployment frequency and reducing rollback time by 70%.

**🔹 Retail Modernization for Kroger**

* Developed secure, repeatable infrastructure templates and multi-region Kubernetes deployments across Azure to support high-traffic web applications, integrated with Log Analytics, Aqua Security, and real-time Helm-based rollouts.

**Tools & Technologies Used:** Azure (AKS, Azure DevOps, App Gateway, Key Vault, Log Analytics), GCP (GKE, IAM, Cloud Build), Terraform, Jenkins, Docker, Kubernetes, Helm, Prometheus, Grafana, Vault, Aqua Security, ArgoCD, FluxCD, GitHub, Bitbucket, Ansible, JIRA, ServiceNow

### **Company: Netenrich (Hyderabad)**

### **Role: Cloud/DevOps Engineer Client: UHS – Healthcare Domain Duration: March 2019 – Feb 2021**

### **Project: Cloud Infrastructure Automation & Monitoring Modernization for UHS**

### **Key Responsibilities:**

* Provisioned AWS infrastructure including EC2, VPC, S3, ELB, RDS, and configured CloudTrail, IAM roles, and CloudWatch dashboards for real-time visibility into critical healthcare workloads.
* Built Azure virtual networks, storage accounts, VMs, and configured ExpressRoute to securely connect on-prem datacenters to cloud, supporting hybrid cloud operations for clinical systems.
* Wrote reusable Terraform scripts to deploy and manage computer, networking, and storage in both Azure and AWS, drastically reducing environment setup time and manual errors.
* Deployed and maintained Docker containers for various healthcare APIs and services, standardizing runtime environments across dev, QA, and production.
* Set up and managed CI/CD pipelines using Jenkins, automating builds, tests, and deployments across multiple application stacks.
* Developed PowerShell scripts for Windows server automation tasks such as patching, provisioning, log cleanup, and service restarts.
* Used Ansible to configure and deploy application servers, database servers, and middleware components across both Linux and Windows hosts.
* Integrated ServerSpec with Ansible to validate post-deployment configurations, ensuring compliance with infrastructure policies before go-live.
* Installed, configured, and supported IBM WebSphere Application Server, Apache HTTP Server, and Tomcat for deploying Java-based hospital applications.
* Configured Nagios and CloudWatch alarms to alert DevOps teams about CPU thresholds, disk usage, HTTP errors, and downtime in production systems.
* Built centralized logging architecture by routing logs from app servers to AWS S3 and parsing them for analytics and alerting.
* Supported Git workflows, handled branching strategies, code merges, and version tagging across application teams working on EMR and billing systems.
* Managed Azure AD Connect to sync on-prem Active Directory with Azure AD, allowing secure single sign-on for healthcare staff and providers.
* Participated in release management, created JIRA tickets for infra changes, conducted impact assessments, and coordinated with QA and support teams for validation.
* Led weekend release deployments, performed smoke testing, validated web application health, and ensured rollback readiness in case of failure.

### **Key Projects:**

### **Healthcare Cloud Modernization for UHS**

* Automated provisioning of cloud environments in both AWS and Azure, deployed EMR-related services using Docker, and ensured HA/DR compliance using Terraform, ExpressRoute, and CloudWatch. Significantly reduced infrastructure setup time and improved deployment reliability across mission-critical systems.

**Tools & Technologies Used:** AWS (EC2, VPC, S3, RDS, Route53, IAM, CloudWatch, CloudTrail, ELB, DynamoDB), Azure (VMs, Storage, ExpressRoute, Key Vault, AD Connect), Terraform, Docker, Jenkins, Ansible, PowerShell, ServerSpec, Apache, WebSphere, Git, JIRA, Selenium

## Abcedo technologies (Mumbai)

## AWS Cloud Engineer

## October 2017 – February 2019

## End client: Ditech- Finance Domain

**Description**: Migrated existing data in the data center to AWS Cloud. Automated various Amazon services such as EC2, RDS, S3, CloudFront, ELB, Autoscaling, AMI, and Route53. Created and managed AWS users and groups and administered IAM. Developed build and deployment scripts using MAVEN, ANT, and worked closely with the QA team.

## Responsibilities:

* Configure auto-scaling policies to scale up/down, EC2 instances based on ELB health checks, and created alarms to be used in auto-scaling decision-making policies.
* Create customized AMIs based on already existing AWS EC2 instances by using create image functionality.
* Create AWS Launch configurations based on customized AMI and used this launch configuration to configure auto-scaling groups.
* Configure Nagios to monitor EC2 Linux instances with Puppet automation and deployed SolarWinds.
* Configured servers to send application data to Splunk for generating reports for analysis.
* Involved in designing and configuring the AWS Secure Notification Service (SNS) and Secure Email Service (SES).
* Created Cloud Formation template stacks to automate for building new VPCs using JSON files.
* Implemented migration using cloud services like AWS from physical to cloud environment.
* Used Elasticsearch, Log stash, and Kibana (ELK) for maintaining system Logs and Bugzilla for tracking code bugs.
* Performed regular snapshots for EBS volumes using CPM (Cloud Protection manager).
* Utilized AWS Route53 to manage DNS zones and also give public DNS names to elastic load balancers.
* Build scripts using ANT and MAVEN build tools in Jenkins to move the source code from one environment to another.
* Deployed and configured AZURE AD Connect. Also configured Azure Network Security Groups, Azure Operational Insight and OMS, AZURE Premium Storage, Network Virtual Appliance.
* Configured and maintained stress servers in different geographical locations and provided a setup in every release to perform stress testing.

**Environment:** AWS, Docker, Nagios, Splunk, Kubernetes, VPC, JavaScript, JSON, Log stash, Kibana, Cloud Protection Manager, ANT, MAVEN, MS Visual Studio, Kubernetes, Git, Ubuntu.

**Abcedo technologies (Mumbai)**

## Build and Release Engineer.

## March 2016 – Aug 2017

## Endcleint-Astellas- Pharma Domain

**Description:** Deploy and maintain various applications in the build pipeline. Engineer for release, manage, and monitor software builds across multiple distributions. Perform user administration, troubleshooting, and trouble ticket administration for deployment-related issues.

## Responsibilities:

* Created S3 buckets and implemented Glacier for storage and backup.
* Configured and launched AWS EC2 instances on multiple OS.
* Responsible for moving data between AWS compute and storage services using a data pipeline.
* Implemented Docker for virtualization of real-time environments, to deploy and run applications securely to fasten release processes. Saving almost 27% of the sprint time.
* Created build pipelines and deployment strategies using Jenkins for migration applications.
* Developed automation using Ansible for repetitive tasks, quick deployments, and proactive configuration management. Reduced over resource requirement by 19%.
* Created job chains with the job builder, parameterized triggers, and streamlined multiple CI/CD processes utilizing Jenkins plugins and API’s.
* Deployed multiple JAVA/J2EE applications through Tomcat application servers.
* Implemented a Git mirror for SVN repository, which enables clients to utilize both Git and SVN.
* Coordinated all build and release activities, and documented release processes.
* Supported server administration, configuration and maintenance.

**Environment:** AWS, Docker, Jenkins, Ansible, Kubernetes, Java/J2EE, Git, SVN, Python, MS Visual Studio, JIRA, Agile Methodologies, VMWARE, Linux, Tomcat Server, Centos, Ubuntu.

**Abcedo technologies (Mumbai)**

**Azure Cloud Engineer**

**November 2014 – February 2016**

**End client: Regeneron- Pharma Domain**

**Description:** Enterprise resource management software was being tailored to the organization's needs combining existing client resource management data with the help of Azure.

## Responsibilities:

* Deployed Azure IaaS virtual machines (VMs) and Cloud services (PaaS role instances) into secure VNets and subnets.
* Experienced in various Azure services such as Azure container service, container registry, batch, traffic manager, express route and load balancer.
* Monitored various activities using Azure OMS. Handled support tickets till closure for the Azure PaaS platform.
* Utilized native Azure services to meet the organization's technology and resiliency requirements. Create a strategy for establishing a secure and well-managed enterprise environment in Azure.
* Experienced in maintaining Maven projects and troubleshooting build issues and packing applications.
* Involved in periodic archiving and storage of the source code for the disaster recovery.
* Administered all Subversion/Git activities.
* Created branches, tags for each release, and required environments.
* Merged branches after the code freeze for all releases.
* Performed baselining of the code after major releases and the merged previous release code to main branches to allow for further development from this baseline.
* Created branches and modified the configuration for applying labels to allow the development teams to view all modified files on the branch.

**Environment:** Azure Services (IaaS and Paas), .NET, Maven, SVN, Git, Python, Selenium, Shell Scripting, MS Visual Studio, VPC, JIRA, MS Visual Studio, Windows, Windows Server.



## March 2012– October 2014

**Linux/Windows System Administrator**

## Responsibilities:

* Configured Apache on EC2 instances to make a precise application that was created is up and running, troubleshoot issues to meet the desired application state.
* Build & Release Engineer for a team that involved different development teams and multiple simultaneous software releases.
* Work on GIT distributed version control system. Maintaining the source code in Github private repository for various applications.
* Building War and Jar files using Maven Build tool and deploying it different environments.
* Installing and configuring Jenkins and extensively worked on Jenkins for Continuous Integration and for End-to-End automation for all build and deployments.
* Responsible for the Plug-in Management, User Management, Build/Deploy Pipeline Setup and End-End Job Setup of all the projects.
* Installing, configuring & maintaining web server applications like Apache Web Server, Apache Tomcat.
* Launching EC2 instances using Amazon web services (Linux/Ubuntu) and configure them as per the application requirements.
* Configure and Maintain user accounts for teams using IAM and assign roles to them to access resources like EC2, RDS, S3, VPC, SNS.
* Administration of RHEL 5/6 that includes installation, testing, tuning, upgrading and loading patches, troubleshooting both physical and virtual server issues.
* Work on creating, cloning Linux virtual Machines, templates using VMware Virtual Client 3.5 and migrating servers between ESX hosts.
* Installed and managed Red Hat Linux using Kickstart and applying security policies for hardening the server based on the company policies.
* Work on troubleshooting Linux network, security related issues, capturing packets using tools such asiptables, firewall, TCP wrappers and NMAP.
* Maintaining, supporting, troubleshooting, configuration, installing, and deploying upgrades on Linux servers and creating & managing LAMP Stack, using Linux, APACHE, MariaDB, MySQL, PHP.
* Extensive experience in Software Development Life Cycle (SDLC) including requirements analysis, design specification, coding and testing of enterprise applications.
* To consider and identify the discrepancies in the system, to assess the risks, and to implement solutions by adhering to the security standards.