****Application

Description automatically generated with low confidence**Name: BalaSubramaniyam Sankar**

**E-Mail:bala.singi@gmail.com**

**Phone:+1 (469) 449 0208**

**Experience Summary**

With almost **13 years** of diverse experience encompassing Automation, Configuration, and Deployment across Clouds and Data Centers, I have held roles as a versatile Cloud Architect, Cloud Consultant, DevOps Engineer, Site Reliability Engineer, and Build/Release Associate. My expertise spans **GCP**, **AWS**, **Azure** as well as **DevOps engineer**. I am proficient in architectural designing, configuring, and managing **GCP Virtual Datacenter** cloud computing platforms, housing Enterprise applications and harnessing tools such as **Compute Engine**, **GKE**, **Stackdriver**, **Cloud** **Functions**, **Cloud** **Storage**, **Cloud** **SQL**, **Cloud** **Load** **Balancing**, and **BigQuery** for various operational needs. My proficiency extends to strategic implementation of containerization technologies, **Kubernetes**, and **Docker**, streamlined through automation in **GCP**. I have proficiently integrated **GitHub** **Actions**, **Azure** **Pipelines**, and **Jenkins**, orchestrating robust **CI/CD** systems for **Kubernetes** container environments, fostering highly available and fault-tolerant application deployment. My specialty includes the creation of **Terraform** scripts to establish **GCP and AWS** infrastructures. Implemented advanced **security controls** such as **identity and access management**, **encryption**, and monitoring tools to safeguard cloud resources and enable real-time **threat detection** and response. Leveraging **Terraform** **templates**, and **Kubernetes** **Engine**, expertise in provisioning and maintaining cloud environments, showcasing expertise across platforms. My expertise with log monitoring tools, ticketing systems, and Agile Methodologies has fostered seamless collaboration and performance monitoring while administering Atlassian products such as **JIRA** and **Confluence**.

**Technical Skills/Tools:**

* Cloud platforms services ( Google Cloud, Azure and AWS)
* Network architecture and security (Express route, Direct/Partnet connect, VPN, Firewall, VPC, Vnet, Peering, DNS, Router, Transit hub, encryption, cryptography, Key vault, KMS, etc.)
* Cloud security (IAM, AAD, WAF, Firewall, Armor, AKV, KMS, GauradDuty, Az security center, cloud event threat detection, aqua, twistlock, sysdig secure etc)
* Serverless technology (Google Cloud Function, Cloud Run)
* DevOps (Jenkins, GITHUB Actions, GITLAB, Azure DevOps, CICD, GKE, AKS, GIT, ArgoCD, etc..)
* IaC (Terraform, ARM, Cloud formation)
* Scripting language and automation (Bash, Shell, Python)
* Database (Cloud SQL, Oracle, MongoAtlas, DynamoDB, Firestore, MemStore etc..)
* Observability Tools : Grafana, NewRelic, AppDynamics, Dynatrace, catchpoint, Prometheus, Splunk and cloud native monitoring tools (Google Operation Suite)

**Work Experience**

* **Senior Technical Lead** I at **Prodapt North America Inc**, Dallas, Texas from Jul 2023 to till now
* **Senior Technical Lead at Prodapt Inc,** Chennai from May 2021 to Jun 2023.
* **Infra Specialist - Manager** at **Cognizant Technology solution**, Chennai from June 2010 to April 2021

**Certification**

* **Microsoft Azure Administrator** - Associate level – Certified
* **Google Associate cloud engineer** – Certified

**Project #1:**

|  |  |
| --- | --- |
| **Role** | Cloud Architect - CCoE |
| **Client** | **Lumen Technologies, US** |
| **Duration** | Nov 2022 – Till now |
| **Tools Used** | GCP, Terraform, Jenkins, ArgoCD, GITHUB Actions, Kubernetes, Grafana, Prometheus, Stackdriver, Commvault |
| **Team Size** | 10+ |

**Technical Responsibilities**

* Design and implemented Highly Available Interconnect in **GCP** using dedicated interconnect.
* **Triage, Author, Design** **Least privilege** Architecture and Fulfill **Zero trust** in GCP.
* Implemented Highly Available nginx proxy environment to avoid network bleed in Onprem network.
* Worked on **Google cloud platform** (**GCP**) services like **compute engine**, **cloud load balancing**, **cloud storage**, **cloud SQL**, **stack driver monitoring**, **Artifact Registry**, and **Kubernetes Engine**
* Created **Terraform** Scripts to Automate and maintain **GCP** services, **Google App Engine**, **Cloud CDN** Distribution, **Kubernetes** **Engine**, **database**, **Compute** **Engine** and **database security groups**, **Cloud** **Storage** and application configuration.
* Launched **Compute Engine VM's**, **Cloud Storage objects**, **VPC**, Subnets by setting up **Terraform** Templates
* Orchestrated **CI/CD** pipeline with use of **GitHub** for version control, **JENKINS** for **CI** with use of other plugins like **Python** and **Artifact Registry** and **Kubernetes** **Engine** for orchestration of containers
* Created **CI/CD** process using **GITHub**, **Jenkins** job creation, **Python** builds, and Created **Docker** Images to store it in **Nexus and Artifact Registry**
* Configured security controls, like **firewalls**, intrusion detection and **IDPS**, and data loss prevention tools
* Conducted regular security assessments, vulnerability scans, and penetration testing to identify and address potential **security risks** and vulnerabilities in applications
* Conducted security audits and risk assessments to identify potential security threats and vulnerabilities in cloud environments
* Designed and implemented comprehensive cloud security strategies and policies across multi-cloud environments (**GCP**) to ensure data protection, compliance, and **threat** **mitigation**
* Conducted in-depth threat modeling exercises for GCP environment, identifying potential security vulnerabilities, attack vectors, and their potential impact on cloud resources.
* Created Self-service for creation and deletion of **DEV** & **QA** infrastructure using **Terraform** for **App Team.**
* Worked on **Kubernetes** to deploy, **load balance**, scale and manage **Kubernetes Engine**, managed pods and troubleshot any Error
* Created repositories on GitHub, assigning members to teams, granting required access, setting up branches and enabling code/branch security configurations to ensure best practice
* Used **Kubernetes Engine** to orchestrate deployment of containers across multiple nodes
* Created dedicated Self hosted **GitHub** runners in **GCP** and maintained them using **Terraform**
* Used **Helm** **charts** and **ArgoCD** to deploy containerized web applications onto **GKE** and implemented configurations for Autoscaling of Deployments
* Worked with monitoring tools like **Prometheus** and **Grafana**
* Provisioned and integrated **AppDynamics** monitoring metrics at build time using **Terraform** and created alerts for spikes and abnormal anomalies within app, deployment, server/host issues
* Created & maintained Jira permission schemes, and **JIRA** projects, workflows, custom fields, screen, and notification schemes
* Implemented and maintained cloud infrastructure process resulting in 20% reduction in infrastructure costs
* Automated **GCP** infrastructure using Terraform resulting in 30% increase in resource usage efficiency

**Environments**: GCP Cloud, Compute Engine, Artifact Registry, Kubernetes Engine,CloudSQL, MongoAtlas, Memstore, CloudFunctions, CloudArmor, LoadBalancer, nginx Proxy, Terraform, Helm, Jira, GitHub, GitHub Actions, Python, ArgoCD, IAM, Security, Prometheus and Grafana.

**Project #2:**

|  |  |
| --- | --- |
| **Role** | DevOps platform Lead |
| **Client** | **VirginMedia – Ireland** |
| **Duration** | Oct 2021 – Oct 2022 |
| **Tools Used** | GCP, Terraform, Jenkins, ArgoCD, GITHUB Actions Kubernetes, Grafana, Prometheus, Stackdriver, Commvault |
| **Team Size** | 7 |
| **Environment** | GCP, UNIX, Windows 2012 and 2016 |

**Technical Responsibilities**

* Create Infra Architecture based on requirement from Application and implement same in **GCP/AWS**
* Onboard Application into **Cloud (GCP/AWS)** and setup CI/CD platform for each application
* Create Infrastructure CI/ CD pipeline using **Terraform** and **GITHUB** actions
* Operate and maintenance of CICD tools and platform
* Create Infra metrics SRE dashboard using **Google stack driver, Prometheus** and **Grafana**.
* Support project teams using the CICD and Cloud platforms with any platform related issues
* Feature enhancements to cloud and CICD platform based on user demand and technology change

**Project #3:**

|  |  |
| --- | --- |
| **Role** | SRE Engineer |
| **Client** | **Verizon** |
| **Duration** | May 2021 – Sep 2021 |
| **Tools Used** | NewRelic, Catchpoint and Grafana |
| **Team Size** | 3 |
| **Environment** | AWS, HP UNIX, Solaris, Windows 2012 and 2016 |

**Technical Responsibilities**

* Design and Develop SRE dashboard for VBIT application’s using **NewRelic**, **Catchpoint** and **Grafana**
* Maintain SRE dashboard and publish Monthly performance application Key metrics to stakeholder’s
* Work with Application and Production support on identifying critical flows and enable synthetic monitoring using Catchpoint.

**Project #4:**

|  |  |
| --- | --- |
| **Role** | DevOps – Offshore Service delivery Manager |
| **Client** | **American International Group, Ireland** |
| **Duration** | May 2020 – April 2021 |
| **Tools Used** | Jenkine cloudbees, GITHUB, ServiceNow, Rally, Python and Powershell |
| **Team Size** | 14 |
| **Environment** | AWS, HP UNIX, Solaris, Windows 2012 and 2016 |

##### Technical Responsibilities

* Design and Develop CI/CD pipelines for EMEA application’s using DevOps toolset’s
* Provide technical solution to Development and DevOps team on implementing CI/CD solutions
* Develop and maintain CM dashboard tool to manage day to day Configuration management team activity using Python, Angular JS and PowerShell
* Involved in migration of PVCS to GITHUB for 100+ applications in EMEA region.
* Primary function to manage delivery of all scheduled and emergent activity in a structured, cost effective and efficient manner.
* Strong experience in delivery with distributed teams onsite/offshore and ability to handle mix of project types and technologies in a fast pace environment.
* Accountable for the day to day coordination of a multi-disciplined team ensuring the competence levels of all personal engaged with BAU and specialized projects and teams are staffed with competent personal and resourced to meet Project/transformation requirements.
* Ability to provide and communicate a coherent vision building high performing teams, strategic planning and leadership a strong second line and Identify required skills and highlight any areas of deficiency or improvement.
* Supervise the activities of team(s), set team goals and targets and coach/empower teams to achieve significant results. Be active and visible role model and promote motivation, good communication and a proactive approach providing guidance and action as required.
* Overall responsibility for ensuring all relevant procedures, specifications and other information is in place for a controlled execution of all activities ensuring and promote transparent knowledge sharing.
* Attend all key meetings, daily calls, shift handovers and responsible for collating status reports (Daily/Weekly Status updates, Monthly Business reviews) from a BAU and Project perspective.

**Project #4:**

|  |  |
| --- | --- |
| **Role** | Sr. DevOps Engineer and Environment Manager |
| **Client** | **Centrica Plc, UK** |
| **Duration** | Sep 2018 to Dec 2019 |
| **Tools Used** | AzureDevOps, Plutora, ServiceNow, JIRA, |
| **Team Size** | 12 |
| **Environment** | AWS, Azure Cloud LINUX and Windows |

##### Responsibilities

* Experience in Build automation and Release Management with Azure DevOps
* Administrating Azure DevOps by implementing RBAC (Role based access control)
* Coordinate with Application team and automate Build/Release process for both SAP and Non SAP applications.
* Involved in creating packer on setting up image based on High Level Technical Design document
* Automated start and stop VM’s and application service using Azure DevOps
* Ensure the Environment is up to date with respect to Kernel, DB, OS, application Patches and updates
* Environment delivery manager for SMART - Non-Production Environments
* Coordinate and notify the relevant third parties of any requirements around backup/ restore planning, capacity planning and storage management and Patching
* Produce and submit costing and Environment delivery effort estimates with inputs from relevant and appropriate third parties
* Coordinate with the relevant Customer stakeholders such as solution architects, infrastructure teams, application support and technical teams to deliver non-production Environments for Projects and releases
* Provide overall governance for all non-production Environment issues, Incidents, problems, or risks
* Coordinate and conduct war room sessions to manage and resolve escalated issues

**Project #5:**

|  |  |
| --- | --- |
| **Role** | Sterling DevOps Engineer |
| **Client** | **John Lewis Partnership, UK** |
| **Duration** | Oct 2016 to Aug 2018 |
| **Tools Used** | Subversion, Jenkins, Jenkins cloud Bees, Sterling, JIRA, Shell, ANT, WAS, Oracle DB, Splunk, Ganglia, Confluence, BMC TMA |
| **Team Size** | 2 |
| **Environment** | Linux, SUSE and AIX |
| **Project Description:** | Omni Channel Customer Ordering |

##### Responsibilities

* Upgrade Sterling order management from 9.2.1 to 9.4
* Implement Jenkins CI/CD pipeline
* Jenkins CloudBees instance setup for Non-Prod and Prod environment and create CI/CD pipeline
* Implement a branching and merging strategy for better code management and parallel project development
* Code build and code promotion management. Share branch for major / minor bug fixes, production patches, small development
* Automated deployment process with no manual intervention
* Identifying, troubleshooting, and resolving problems with the build process and ensures the release has been accepted by all parties
* Analyzing and recommending corrective action and/or resolving

**Project #6:**

|  |  |
| --- | --- |
| **Role** | Sr. DevOps Engineer |
| **Client** | **Arcadia Group Limited, UK** |
| **Duration** | June 2014 till Oct 2016 |
| **Tools Used** | Subversion, Jenkins, JIRA, Shell, WCBD, ANT, WAS and Sterling |
| **Team Size** | 4 |
| **Environment** | AIX, Linux and Windows |
| **Project Description:** | Digital support is part of Arcadia Group Limited that supports Ecommerce Application for 44 Websites of 8 brands. Perform various project development and application support to 8 brands to match market trends. |

##### Responsibilities

* Implement a branching and merging strategy for better code management and parallel project development
* Code build and code promotion management. Share branch for major / minor bug fixes, production patches, small development
* Code merge from main branch to the feature specific branches after each release
* Implemented partial deployment to deploy only change module in each release
* Identifying, troubleshooting, and resolving problems with the build process and ensures the release has been accepted by all parties
* Analyzing and recommending corrective action and/or resolving

**Project 6:**

|  |  |
| --- | --- |
| **Title** | Build and Release Lead |
| **Client** | **Wal-Mart** |
| **Duration** | Feb 2011 – May 2014 |
| **Tools Used** | Subversion, AnthillPro, UNIX, Shell, Perl, Remedy 6 and 7 |
| **Team Size** | 15 |
| **Environment** | HP AIX, Windows NT Server, Windows XP |
| **Project Description:** | Global Logistics Services (GLS) is a part of Wal-Mart technology division that supports the application systems used by the Distribution Centers (DC). There are multiple types of DC’s based on the types of merchandise/store that is being serviced by the DC. The DC currently operates through a Warehouse Management System (WMS) that has 4 code bases and 17 different flavors of WMS applications running in various distribution centers across the globe. The initiative of this project is to develop a new unified WMS application to be used by all their distribution centers. Due to the magnitude & breadth of work and its impact to the business, Wal-Mart has divided the project into two phases. |

##### Responsibilities

* **Release management**
* Prepare and publish overall Release Calendar, including specific release milestones and for sprint/monthly wise
* Identify potential conflicting deployments, release dependencies, risk, and business justification.
* Manage release milestones and take appropriate action when milestones are not met.
* Act as a Communication channel within the team and to the customers for CM related queries
* Publish release summary to customer and stakeholders.
* **Build and Deployment Management**
* Setup & Configure Build Management System for current and upcoming release based on release calendar
* Deploy the build into Dev, SIT, UAT, Pre Prod and Production environment