**Vijay B** **vijay070320@gmail.com**

**Devops Engineer** **+1 (281) 768 2651**

**Experience summary**

Accomplished 14+ years of experience in **Automation engineering**&**development**, IT Infrastructure support, Platform management, automation**, system administration**, **Kubernetes**, **Ansible**, **Build & Release managing** server infrastructures, **CI/CD Pipeline**, and data-center operations across multiple platforms (**UNIX/Linux**).

**CAREER PROFICIENCY**

###### Presently associated with Dell as a Principal software Engineer.

###### Experience on automation engine Ansible that automates cloud provisioning, configuration management, application deployment.

###### Experience in developing Ansible custom modules

###### Experience on Ansible restAPI

###### Strongexperience in developing Kubernetes deployment file

###### Experience on Ansible and Ansible Tower to automate repetitive tasks, to deploy critical applications quickly, and proactively manage the changes and wrote many playbooks to manage Web applications.

###### Experienced in Azure Kubernetes service to produce production-grade Kubernetes that allow enterprises to reliably deploy and run containerized workloads across private and public clouds.

###### Extensive experience in installing, configuring and administering JenkinsCI tool on Linux machines. Used Jenkins pipelines to drive all Microservices builds out to the Docker registry and then deployed to Kubernetes, Created Pods and managed using Kubernetes.

###### Strong Experience with Kubernetes and Docker containerization with EKS

###### Implemented microservices, application development, and migration using AWS/Azure services such as Azure DevOps, Kubernetes Service (AKS), Container Registry, Cosmos DB, and Grafana, Azure pipelines, Monitor, RBAC, AWS Kubernetes EKS and KubernetesAPI to run workloads on EKS Clusters.

###### Experience in setting up the infrastructure using AWS services including ELB, EC2, Elastic container services (ECS), Auto-scaling, S3, IAM, VPC, Cloud Watch, Elastic Cache.

###### Designed AWS Cloud Formation templates to create custom sized VPC, Subnets, and NAT to ensure successful deployment of Web applications, database templates and expertise in architecting secure VPC solutions in AWS with the help of Network ACLs, Security groups, public and private network configurations.

###### Experience in maintaining Amazon Web Services and Hands on experience in Architecting Legacy Data Migration projects such as Teradata to AWS Redshift, migration, Teradata to SnowflakeMigration, AWSCloud from on-premises.

###### Develop ansible playbooks for Tower & core install, upgrade and toil automations such as daily health check, python virtual environment creation, pip module installs, Configuration changes, update patches, packages install.

###### Experience with the creation of Docker Containers and Deploy into different environments

###### Strong Experience in Solaris/Linux Administration

###### Having knowledge on container orchestration tools such as Kubernetes for container management

###### Having knowledge on creating and deploying the Helm Charts in Kubernetes Cluster

###### Experience with Continuous Integration tools, such as Jenkins

###### Expertise in server configuration, system migration and server transitions

###### Experience in automating regular tasks by using Shell Script

###### Experience with monitoring tools, such as Prometheus, Grafana

###### Experience writing implementation plans for installing software components on build agents, and working with application services team to execute the install

###### Supporting key technology initiatives including virtualization, data center, disaster recovery, and capacity planning

###### Agile software methodologies such as SCRUM and Kanban and JIRA for issue tracking

###### Having good work experience in Data Center

# Technical Skills:

Operating System : Solaris, AIX, Linux (RHEL)

Automation Tools : Ansible, Terraform

Scripting : Shell, Python,

Containers : Docker & Kubernetes

Source Code Management :Git, GitHub

Integration Tool :Jenkins

Cloud platforms :TKGi Pivotal Cloud (Bosh), AWS, Azure

Monitoring Tools : Splunk, CloudWatch, Prometheus and Grafana

Virtualization Tools : VM Ware ESX/ESXi, Docker, Amazon AWS/EC2, Vagrant, LDOMS, Zones

Databases : Teradata and Hadoop

Version Control Tool : GIT

**Certifications**

* Sun Solaris System Administrator (Solaris 9)
* AWS Certified SysOps Administrator

# Educational Qualification

* Master of Computer Applications from Osmania University

**PROFESSIONAL EXPERIENCE**

###### Dell consultant, Houston, TX March 2022 to Till Date

**Principal software Engineer**

###### Developed Ansible roles to upgrade Mongo DB agent by calling REST API

###### Wrote playbooks to path the servers in rolling upgrade

###### 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 setup reverse proxy Nginx in the cluster.

###### Automate manual tasks by using Ansible, shell

###### Implemented Jenkins pipelines into Azure pipelines to drive all micro services builds out to the Docker registry and then deployed to Kubernetes, Created Pods and managed using AKS.

###### 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.

###### Developed Ansible playbooks, inventories and custom playbooks in YAML, and 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 which can work on different servers.

###### Managing PKS pivotal container services with Kubernetes

###### Kubernetes security remediation by using kenna vulnerability tool

###### Kubernetes Security controls implementation with ref. of Open policy Agent (OPA) policies like Deny unauthorized hostPath, hostPID& Run container as a non-root user and Apparmor& Seccomp ...etc

###### Automation of harbor Image repository upgrades

###### Developed Kubernetes deployment files to onboard java applications into Kubernetes cluster

###### We do Velero to backup and restore a Kubernetescluster resources and persistent volumes.

###### Build the PPDM (Power Protect data manager) for Entire cluster backups

###### PKS Platform (OpsMan/ Director/TKGI) and ETCD backups to S3 Location

###### Ensured successful architecture and deployment of enterprise grade PaaS and CaaS Solutions using Pivotal Cloud Foundry (PCF) as well proper operation during initial application migration and set new development

###### Experience in writing Ansible Playbooks, created custom playbooks written in YAML, encrypted the data using Ansible Vault and maintained role-based access control by using Ansible Tower to manage web applications, Environments configuration files, Users, Mountpoints and Packages.

###### Pivotal (TKGi) / Kubernetes / VCenter Service Account rotational Activities

###### ELK Upgrade Activities from 7.16.3 to 7.17.4, Providing the ELK watcher admin access to customers.

###### Deploying ISTIO into PKS Platform

###### Pivotal Could Platform (PCF) /TKGi upgrade activities to 1.12.7\

###### Backup and Restore the clusters using PowerProtect Data Manager

###### Maintaining the NSX-T Load Balancer for all data centers.

###### EMC, MA September 2014 - March 2022

**Specialist Production Support**

* Monitor/Maintain/**Troubleshoot** application and service deployments running in containerized infrastructure (**Kubernetes**).
* Responsible for implementing containerized based applications on **Amazon EKS Kubernetes**, **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 setup reverse proxy **Nginx** in the cluster.
* Deployed and optimized two tier **Java**, **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.
* Creating **Docker** images, Compose, **Docker** Registry and handling multiple images primarily for middleware installations and domain configurations
* Experience deploying a **Kubernetescluster** the-hard-way &**Kubeadm**
* Well versed in all **Kubernetes** constructs i.e., namespaces, metadata, services, pods, containers, ingress, resource quota, persistent volumes, storage class
* Experienced with deploying stateful applications / Databases on **Kubernetes**
* Building and configuring **Kubernetes**-based infrastructure, **Core-DNS**, Kube Proxy, Ingress,
* Good understanding of metrics, monitoring, and alerting in a **Kubernetes** micro service environment like Prometheus &**Grafana**
* Develop and test ansible playbooks to install the software packages
* Create roles for software packages for reusability and dependency with other software.
* Coordinate with enterprise ansible team to resolve the issues like modules libraries, collections, plugins, pipeline and tower support
* Document the process to deploy software install role and upload to wiki.
* Develop a **python** script to launch the jobs using extra variables and get the job log to email via rest api.
* Develop playbook to create RPM packages from source code.
* Good knowledge in **Kubernetes** security like **RBAC**, network policy and creating **HELM charts**
* Implemented **AWS** solutions using **EC2**, **S3**, **RDS**, **Route53**, **EBS**, **ElasticLoad Balancer** and Auto scaling groups.
* Managing **Kubernetes** storages (**PV, PVC, Storage Classes, Provisioners**) and Networking (Services, Endpoints, **DNS**, Load Balancers)
* Design and develop automation capabilities to reduce or eliminate manual tasks related to both application infrastructure delivery and the operations of the resulting solution
* Analyze technology requirements and specifications to determine compatibility with application and server infrastructure standard
* Manage different **AZURE** environment for provisioning of **Linux/Windows** servers and services executed by the providers.
* Worked on **Microsoft Azure** (Public) Cloud to provide IaaS support to client. Create Virtual Machines through **Power Shell Script** and **Azure** Portal.
* Configure Window Failover Cluster by creating Quorum for File sharing in **Azure Cloud.**
* Convert existing Virtual Machine from Standard to Premium Storage Account. Patching and Validating of Virtual Machine in **Azure**.
* Automating repetitive tasks
* Creating and maintaining documentation of the build/release process
* Use Unix Cron jobs for the Automation of Build and Deployment.
* Managing large scale production systems and working with customers to troubleshoot incidents
* Worked with the automated scripts for the Build and Deployment of the applications.
* Maintained multiple platforms builds which includes windows, **Linux**, **Solaris** and **Aix**
* Created a complete release process doc, which explains all the steps involved in the releases
* **IPMP** implementations using probe and link-based technologies.
* Extensively perform server including **VERITAS** products such as **VCS/VXVM, LVM, SVM**, etc.
* Install/upgrade - **VCS/VxVM/HBA firmware/lpfc**/ Power Path.
* Built and configured **UNIX** servers with **VERITAS** Cluster as per the client requirements.
* Rebuilt / reconfigured **UNIX** servers (**Solaris**) and **Linux (RHEL)** using jumpstart and kickstart installed, upgraded, configured as per Organizational standard.
* Extensive experience in servers’ migration - physical servers from DC to DC
* Monitor System Performance Parameters using iostat, vmstat, prstat, netstat
* Involved in DR tests from end to end. DR activities like VCS fail over and zone fail overs, as well as fail back activities.
* Server builds - **PROD/DR/DEV/UAT/SIT** servers involved from scratch to client hand over.
* **VCS** setups for Zones, Branded zones for running **Solaris 9/10** as virtual containers on Solaris 10 physical operating systems,
* Writing basic **UNIX** scripts to fetch server outputs and for also server operations.
* Involved in **VERITAS** volume manager and **VERITAS** cluster Patch & package upgrades.
* **Linux LVM** creation and Network Bonding configuration.

###### Staples, MA December 2010 to August 2014

**IT Infrastructure Analyst**

* Creating and maintaining documentation of the **build/relea**se process
* Handling System outages and solving the problems as per the SLA
* Troubleshooting OS level performance issues.
* Managing Storage with **VERITAS** Volume Manager, **SVM**
* Troubleshooting the boot disk problems and booting problems in **VERITAS** and **SVM**
* Administration of **VERITASCluster**, Cluster booting problems, service group and resource problems
* Patch Management (Installed MP, RP and OS Patches), Handling patch back outs
* Estate management **UNIX** remediation process: **VSF** patching upgrade **HBA** upgrade, troubleshooting on critical issues, while doing the patching.
* Create and maintain necessary documentation and procedures in support of migration such as storage, **VERITAS** Volume manager and **VERITASCluster**.
* Performing the Commissioning and decommissioning of servers in a datacenter
* Monitor System Performance Parameters using iostat, vmstat, prstat, netstat
* Configuration and Administration of File System & File Security
* Managing server Storage using **VVM**&**SVM** for data redundancy & Expansion of storage
* Configuring and troubleshooting **NIC** and **IPMP**
* Establishing the security Keys between servers using **SSH** or **RSH**
* Knowledge on Troubleshooting various hardware and software issues by raising SUN cases,
* **VERITAS** Cases and co-coordinating with various teams, SUN and **VERITAS**
* IT resource capacity planned by decommissioning physical servers and consolidate virtualization using containers/zones
* Experienced on Servers Rack Mounting in Data Center.
* Built and configured **UNIX** servers with **VERITAS** Cluster as per the client requirements.
* Rebuilt / reconfigure **UNIX** servers (**Solaris, Linux**) using jumpstart/PXE boot and installed, upgraded, configured as per Adobe standards
* Extensive experience in server’s migration - physical servers from DC to DC and zones migration.
* Ticket Handling using Infra Enterprise PRD
* Handling System outages and solving the problems as per the SLA
* Troubleshooting OS level performance issues and boot disk problems in **VXVM** and **SVM**
* Managing **VERITAS** Volume Manager and Solaris Volume manager.
* Handling Disk problems and replacements and replacing the faulty memory modules for serves
* Administration of **VCS**, Cluster booting problems, service group problems, resource problems.
* Coordinating with customers and vendors to resolve the problems within the SLA
* Patch Management (Installed MP and RP patches and OS Patches), Handling patch back outs
* Responsible for all site infrastructure servers and installed and configured SSH for security
* Installing and Base lining servers and Base lining sun desktops
* Performed **Unix/Linux** backup and recovery and providing remote technical support to clients.
* Installed, upgraded, patched and configured **UNIX (Solaris)/Linux (Red hat)** and zones/Containers.
* Installation, Configuration and maintenance of Hosted **VMware** products.

**HCL America January 2008 to November2010**

**Sr Specialist Virtualization**

Description: Served as a **VMware** Administrator to design and implementation of new datacenters. Architected, designed, implemented and supported Virtual environment using **VMware** technologies. Design and implementation Disaster recovery using products like **SRM**. And also designed Physical datacenters for different clients