

**VINAY B**

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**TECHNICAL SUMMARY**

Over **9+ years** of hands-on experience in **Linux** and **System Administration** with a major focus on **Site Reliability Engineering** **DevOps**, **Cloud** technologies- Supporting, Automating, Cloud and Optimizing mission critical deployments, **Software configuration management (SCM), Containerization, CI/CD**, DevOps processes and **Virtualization** technologies which includes Troubleshooting Performance Issues.

* Experience in various Azure Services like **Compute (Web Roles, Worker Roles), Caching, SQL Azure, NoSQL, Storage and Network Services, Azure Active Directory, Internet of Things (IoT), Azure Monitoring, API Management, Scheduling, Autoscaling, Azure Identity & Access Management**, **Data Factory,** **PowerShell** Automation and other Azure Services.
* Experience in provisioning of **IaaS, PaaS** Virtual Machines and Web, Worker roles on Microsoft AZURE **Classic** and Azure Resource Manager (**ARM**), Deployed Web applications on Azure using **PowerShell** Workflow.
* Troubleshoot **Azure** related issues and engage internal teams and vendor for issue resolutions.
* Good understanding of Pivotal Cloud Foundry (PCF) Architecture (Diego Architecture), PCF components and their functionalities and experienced in using Pivotal Cloud Foundry (PCF) CLI for deploying applications and other Cloud Foundry (CF) management activities.
* Involved in designing and deploying a multitude application utilizing almost all the **AWS** stack (Including **EC2, S3, EBS, VPC, ELB, AMI, CloudWatch, Route53, RDS, Dynamo DB, Autoscaling, Security Groups, RedShift, Kinesis, CloudFormation, SNS, SQS, IAM**) focusing on high-availability, fault tolerance, and auto-scaling.
* Experience in using **Lambda** to read records from the **Kinesis Data stream** and invoke functions synchronously with multiple events that contain stream records.
* Responsible for configuring and maintaining Amazon **AWS IAM Service: IAM Policies, Roles, Users, Groups, AWS Access Keys and MFA.** Also utilized **Hashicorp Vault** for secrets Management.
* Experience in using **Kubernetes** asan open source platform for automating deployment, scaling and operations of applications containers across clusters of hosts, providing container centric infrastructure**.**
* Experience in Implementation of Docker and Various Docker Orchestration tools such as **docker-compose, docker-swarm, docker trusted registry (DTR) and universal control plane (UCP).**
* Orchestrated Docker containers using **Docker Swarm, Docker Compose, Docker Hub, Docker Weave.**
* Worked on Docker service rolling updated, **“BLUE GREEN DEPLOYMENT”** to implement zero downtime PROD deployments.
* Strong knowledge on **Ansible Roles**, inventory, **Ansible Tower**, **Ansible Galaxy** concepts and used **Ansible Control Server** to deploy plays and playbooks to the machines and systems in the inventory.
* Worked on integrating **Ansible Tower** with cloud environment, provided role-based access control, setup job monitoring, email notifications, scheduled jobs, multi-playbook workflow to chain playbooks.
* Proficient in implementing **Chef** Recipes for Deployment on build on internal Data Centre Servers and reused modified same **Chef** Recipes to create a Deployment directly into Amazon **EC2** instance.
* Experience in using **Puppet** to automate repetitive tasks, quickly deploy critical applications, proactively manage, change and create custom **Puppet** module skeletons.
* Experience in Automation **framework, Build, Release and Integration** in design and Implementation of **Continuous Integration, Continuous Delivery, Continuous Deployment**.
* Experience in Implementation of **Master/Slave** architecture, Installed Plugins, created project jobs and configured jobs **in Jenkins.**
* Implemented **ELK** stack **(Elasticsearch, Logstash and Kibana)** for Log indexing.
* Experience in **Bitbucket** Administration in creating repositories, configuring popular plugins.
* Configured **SonarQube** code quality tool and integrated it with **Jenkins** andImplemented SonarQube to analyze code quality code quality metrics, to verify the coding standards and setup quality gates to allow/fail builds as per requirement.
* Responsible for pom, Unit test cases, Sonar dashboard for **Selenium** Test cases for all the **micro services** and worked on the ms’s logs and sonar dashboard monitor for all the existing **micro-services**.
* Hands-on experience with Source Controller tools such as **Subversion (SVN), Git** and **IBM ClearCase**.
* Experience in automating the processes with Build Management Tools such as **ANT, Maven, Gradle** and **MS Build.**
* Expertise in Installing, Configuring, Managing the monitoring tools such as **Splunk, NewRelic** and **Nagios** for Resource Monitoring/Network Monitoring/ Log Trace Monitoring.
* Ability to build deployment, build scripts and automated solutions using scripting languages such as **Groovy, Shell, Python and Ruby.**
* Expert in **JIRA** Administration and Maintenance, including creating projects, workflow schemas, user authorizations, backup and Restoration.
* Worked on web servers and application servers like Web logic, Tomcat, Web sphere, JBOSS to deploy code.
* High exposure to REMEDY and JIRA tracking tools for tracking defects and changes for Change Management.
* Working experience on Automation Testing frameworks like Selenium, Katalon Studio.
* Experience in installing, configuring, supporting and troubleshooting **Unix/Linux Networking** services and protocols like **NIS, NIS+, OSPF, LDAP, DNS, NFS, DHCP, NAS, FTP, SSH.**
* Strong ability to troubleshoot any issues generated while building, deploying and in production support.

**TECHNICAL SKILLS**

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| **Cloud** | *Amazon Web Services, Microsoft Azure, PCF. OpenStack* |
| **Container/ Orchestration Tools** | *Kubernetes, Docker, OpenShift* |
| **CM & Deployment Tools** | *Chef, Ansible, Puppet, Terraform.* |
| **CI/CD Tools** | *Jenkins, Build Forge, Bamboo, TFS, VSTS.* |
| **Build Tools** | *Maven, Ant, Gradle, InstallShield, MS Build.* |
| **Repositories** | *Artifactory, Nexus.* |
| **Monitoring Tools** | *JIRA, SonarQube, Splunk, Elasticsearch, Logstash and Kibana (ELK)* |
| **Version Control** | *GIT, Subversion, CVS, Clear Case, Bitbucket* |
| **Programming/ Scripting Languages** | *Shell, Python, Ruby, Groovy, Bash, YAML, JSON, XML, Golang PowerShell.* |
| **Web/Application Servers** | *Tomcat, Web logic, Web Sphere.* |
| **Database** | *SQL Server, No-SQL Database, My SQL, DB2* |
| **Operating Systems** | *Windows, LINUX, RHEL, MAC.* |

PROFESSIONAL EXPERIENCE

**Sr. Cloud/DevOps Engineer November 2021­-Till date**

**Microsoft, Bellevue**

* Managing Microsoft Windows Azure Platform as a Service and provision applications as a service through subscriptions.
* Working on **Azure Kubernetes Service** to deploy a managed Kubernetes cluster in Azure and created an AKS cluster in the Azure portal.
* Worked on **Azure IAAS** services, managed few IAAS services like Virtual machines, Azure storage, Networking, AKS.
* Expertise on **Azure Data Factory** to orchestrate the intake of data from different sources like **Azure Storage Blobs, Azure SQL Database**, **Azure SQL Data Warehouse**, and on-premises databases to **Azure Data Lake Store**.
* Installing Log analytics extensions, Storage Diagnostics extensions, Network Watcher and Custom extensions as required to setup monitoring and logging using Azure Monitor, App Insights, Log Analytics.
* Writing **PowerShell scripts** to Deploy C#.net applications using Custom Extensions.
* Designed and developed automation test scripts using **PowerShell.**
* Provide Enhanced operational support and sustained maintenance of deployed systems.
* Migrated on-premises applications to Azure and configured VNETs and subnets as per the project requirement also performed PowerShell scripting to do Patching, Imaging, and Deployments in Azure.
* Created multiple Python, Bash, Shell and Ruby Shell Scripts for various application-level tasks.
* Established infrastructure and service monitoring using **Prometheus and Grafana**.
* Expertise in configuring Log monitoring tools like ELK (Elasticsearch, LogStash & Kibana), Nagios, Splunk and Grafana to monitor logs of applications in prod and non-prod.
* Creation of **Prometheus-Grafana** setup using Terraform/Ansible for various targets like Kafka, Spark, cosmoDB, node exporters etc.
* Experience with Configuration Management automation tool **Ansible** and has worked on integrating Ansible YAML Scripts.
* Automated setting up server infrastructure for the DevOps services, using Ansible, shell and python scripts.
* Extensively worked with Scheduling, deploying, managing container replicas onto a node using Kubernetes and experienced in creating Kubernetes clusters work with **Helm charts** running on the same cluster resources.
* Experience in using **Helm chart** to deploy Kube objects (template) in Continuous Integration and deployment.
* Wrote Python code embedded with JSON and XML to produce HTTP GET request, parsing HTML data from websites.
* Run the daily, weekly and nightly Builds with Batch, Jira, Perl and Scripts.
* Created dashboards in VSTS for CI/CD pipelines, Work items and bugs.
* Automating the configuration setup when moving an application from one environment to other using the PowerShell Desired State Configuration scripts (DSC).
* Deployed the configuration of Virtual Machines by using PowerShell Desired State Configuration which is a management platform in Windows **PowerShell.**
* Automate Datadog Dashboards with the stack through **Terraform Scripts**.
* Worked in container-based technologies like Docker, Kubernetes and OpenShift.
* Installed Mysql on Cassandra and enabled MongoDB to read from Mysql Tables.
* Managed the OpenShift cluster that includes scaling up and down the Azure app nodes.
* Worked on OpenShift for container management and to enhance container platform multi - tenancy.
* Utilized Docker for the runtime environment of the CI/CD system to build, test deploy.
* Created builds and release pipelines in **Azure DevOps** and done deployments using SPN (secure endpoint connection) for implementing CI/CD.

**Site Reliability Engineer**

**Walgreens, Deerfield, IL**. **March 2020 – October 2021**

* Worked on **Microsoft Azure** (Public) Cloud to provide IaaS support to 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**.
* Configured Site to Site VPN Connectivity. Configured Window Failover Cluster by creating Quorum for File sharing in Azure Cloud.
* Designed AZURE Resource Manager (**ARM**) templates and custom build steps using PowerShell. Identified and logged defects in **VSTS** and interacted with developers to prioritize the issues.
* Defined resources and specified deployment parameters to **Azure Resource Manager (ARM)** templates to create resource group of virtual machines.
* Converted existing Virtual Machine from Standard to Premium Storage Account. Involved in Patching and Validating of Virtual Machine in Azure.
* Created and configured **HTTP** Triggers in the **Azure Functions** with Application Insights for monitoring and performing load testing on the applications using the **VSTS.**
* Involved on migrating SQL Server databases to SQL Azure database using **SQL Azure Migration Wizard** and used **Python API** to upload agent logs into **Azure blob storage**. Migrating an On-premise Virtual machine to Azure Resource Manager Subscription with **Azure Site Recovery**.
* Designed and Implemented Firewall appliances in Azure and configure the same for IDS/IPS and to establish VPN connections and worked on Permission Management OS – Security Enhanced Linux, Windows File ACLs.
* Implemented Micro-services using **Pivotal Cloud Foundry (PCF)** platform build upon **Spring Boot Services** and created workflows on **TeamCity** for setting up automated pipelines for **CI/CD** with **PCF.**
* Advised Open-source **Kubernetes** and **Docker** projects and design discussions in the Cloud Native Computing Foundation.
* Created and troubleshooted **Kubernetes YAML** files to deploy SCM CI/CD applications automatically and Idempotently to reduce time costs and used **Kubernetes** to deploy, load balance, scale and manage docker containers with multiple name-spaced versions.
* Deployed **Kubernetes** templates for various applications like **Cassandra, Grafana, Kafka** and setting up **Kubernetes Clusters** for running microservices and pushed microservices into production with **Kubernetes** backed Infrastructure.
* Used **Golang** to log the different host system event and alert information to **Cassandra.**
* Monitor Azure Infrastructure through System Center Operation Manager (**SCOM**). Coordinating with Microsoft for increasing subscription limit like- Core limit and Cloud Services. Handled and Resolved Client's Issues remotely.
* Used Team foundation server **(TFS)** for maintaining source and documentation control and created automated build and deployment process for application, re-engineering setup for better user experience, and leading up to building a continuous integration system for all our products.
* Responsible for Continuous Integration (CI) and Continuous Delivery (CD) process implementation using **Jenkins** along with Shell scripts to automate routine jobs.
* Installed **Jenkins** plugins for GIT Repository, Setup SCM Polling for Immediate Build with **Ant** and **Maven** Repository **Nexus**, **Artifactory** and Deployed Apps using custom ruby modules through **Puppet** as a CI/CD process.
* Worked on Ansible Playbooks with Ansible roles. Created inventory in Ansible for automating the continuous deployment. Configure the servers, deploy software, and orchestrate continuous deployments or zero downtime rolling updates.
* Implemented Ansible Tower for managing complex network deployments by adding control, knowledge and delegation to Ansible powered environments.
* Created Ansible roles in YAML and defined tasks, variables, files, handlers and templates. Created inventory and configured the Ansible files for parallel deployment in Ansible for automating the Continuous delivery process.
* Used **Bitbucket** Server for secure, fast, enterprise-grade controls, like fine-grained permissions. Contributions to various other open-source projects on **Bitbucket.**
* Worked on Continuous Integration (CI) pipeline consisting of **Visual studio** , **GitHub, Jenkins,** in order to support test, configure and deliver the **C# Applications**.
* Involved in **Jira** as defect tracking system and configure various workflow, customizations and plug-ins for **Jira** bug/issue tracker.
* Deployed Splunk **forwarders, indexers** and **search heads** to monitor, analyze and visualize the azure VM’s on the Splunk dashboard that helps in increasing the cluster performance.
* Worked on PowerShell scripts to automate the **Azure Cloud system** in creation of **Resource groups, Web Applications, Azure Storage Blobs & Tables, firewall** rules.
* Worked on NoSQL database MongoDB to replica setup and sharing. Also experience in managing replica set.
* Installed, configured and Administered of all **UNIX/LINUX** servers on Azure, includes the design and selection of relevant hardware to support the installation/upgrades of **Ubuntu, CentOS.**

**Cloud/DevOps Engineer**

**Wells Fargo, Dallas, TX January 2018 – February 2020**

**Responsibilities:**

* Experience on **AWS cloud services** like **EC2, S3, RDS, ELB, EBS, VPC, Route53, Auto scaling groups, Cloud watch, Cloud Front, IAM** for installing configuring and troubleshooting on various Amazon images for server migration from physical into cloud.
* Designed **Architectural Diagrams** for different applications before migrating into **Amazon cloud** for flexible, cost- effective, reliable, scalable, high-performance and secured.
* Build servers using AWS: **Importing volumes, launching EC2, creating security groups, auto-scaling, load balancers, Route 53, SES and SNS** in the defined virtual private connection.
* Creating **alarms in Cloud Watch service** for monitoring the server performance, CPU Utilization, disk usage etc.
* Designing and configuring the **AWS Secure Notification Service (SNS)** and **Secure Email Service (SES)** architecture of the solution and working with a client.
* Managed users and groups using the **Amazon Identity and Access Management (IAM**).
* Managing **IAM accounts (with MFA)** and **IAM policies** to meet security audit & compliance requirements.
* Maintaining the user accounts **(IAM), RDS, Route 53, SES and SNS services** in the AWS cloud.
* Server migration using cloud services like AWS from physical to cloud environment.
* Created **Cloud Formation template** stacks to automate for building new **VPCs using JSON files**.
* Experience with AWS, which included managing application in the cloud and creating **instances**.
* Created **Snapshots and Amazon Machine Images (AMI's)** of EC2 Instance for snapshots and creating **clone instances**.
* Setting up private networks and sub-networks using **Virtual Private Cloud (VPC)** and creating security groups to associate with the networks.
* Managed multiple AWS accounts with multiple VPC's for both production and non-prod where primary objectives included automation, build out, integration and cost control.
* Taking regular snapshots for **EBS volumes** using **CPM (Cloud Protection manager).**
* Tested and configured **AWS Workspaces** (Windows virtual desktop solution) for custom application requirement.
* Defined **AWS Security Groups** which acted as **virtual firewalls** that controlled the traffic allowed reaching one or more **AWS EC2 instances.**
* Deploying **EC2** instances, **ELBs** by using **Cloud Formation in AWS**.
* Used Amazon **Route53** to manage **DNS** zones and also give public DNS names to **elastic load balancers IP's.**
* Used Amazon IAM to grant fine-grained access to AWS resources to users. Also managed roles and permissions of users to AWS account through **IAM.**
* Used **Cloud Front** to deliver content from AWS edge locations to users, allowing for further reduction of load on front-end servers.

**Linux /Unix Administrator**

**WNS Global Services, Pune, India** **November 2012 – December 2015**

**Responsibilities:**

* Worked on **migration** from physical to virtual (**P2V**) environment for **Red Hat Linux**
* Worked on switching production to virtual from bare metal, as well as decommission and shutdown legacy physical servers.
* Worked on Recovery from failed restore, post deployment **VM Setup.**
* Create scripts to automate daily tasks like creating **LAMP stack** VPS’s, chrooted sftp, ZFS backup scripts, VPS load testing, SSL installations, ecommerce search engine index replication, apache-solr setup, My sql replication.
* Installed and configured **Apache Webserver in a LAMP stack**.
* Operationally supported systems in **AWS Networking and security administration** and troubleshooting.
* Implemented **Puppet** for Package and configuration management.
* Configured and used automation tools like **PUPPET** to push updates like **sudo, ssh. Send mail and patches.**
* Designed, built, and deployed multitude applications utilizing **AWS stack** focusing on high-availability, fault tolerance, and auto-scaling.
* Worked on Migration of servers from a physical data center environment to **AWS**.
* Automated routine tasks using scripting languages like **Ruby and Python**
* Monitoring and service issue resolution of **LAMP stack web servers**, both shared and VPS.
* Worked on **Puppet** extensively for deployment for servers, creating on custom scripts and managing changes through **Puppet master server** on its clients.
* Assembled **Puppet Master, Agent**, and Database servers on multiple **Red Hat Enterprise Linux** Platforms.
* Created profiles in **Puppet** and pushed them across all the servers in **UNIX and Linux environment.**
* Used **Puppet Master** to keep in sync configuration on hosts running agents.
* Change root password on all servers from centralized **Puppet master server**.
* Managed user/group and **sudo access on the Linux operating system**.
* Setup static IP address for server when there is a new server build.
* Troubleshoot network issue from the OS standpoint using net stat, ping, traceroute, and tcpdump commands.
* Document process and procedures for system and database usage.

**EDUCATION:**

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| **Degree** | **University** | **Year** |
| Master of Science in Information Assurance | St Cloud State University | January 2016 -December 2017 |
| Bachelor of Technology in Electronics and Communication Engineering | Jawaharlal Nehru Technological University - Hyderabad | August 2008 – May 2012 |