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DevOps Engineer/Cloud Engineer

Professional Summary

- Skilled professional with around 5 Years of experience in IT industry comprising of Strong background in Development Operations (**DevOps**), **Linux/Unix & Network Administration**, **VMWare**, **CI/CD (Continuous Integration / Continuous Deployment)** process, **Software Configuration Management (SCM)** and **Cloud Management** all within that suites the needs of an environment under DevOps Culture.
- Expertise in using **Cloud Formation template** and Terraform as a IaC tool for managing and provisioning infrastructure.
- Deployed microservices, including provisioning **AWS** environments using **Ansible** Playbooks and Provisioned **load balancer**, **auto-scaling group** and launch configuration for micro services using Ansible.
- Proficient in **AWS Cloud** platform and its features which includes **EC2, VPC, EBS, AMI, SNS, RDS, CloudWatch, Cloud Trail, CloudFormation AWS Config, Autoscaling, CloudFront, IAM, S3, and R53**.
- Good experience working on various scripts like **Shell, Korn, Bash, Ruby and Python**.
- Design, Plan and create **Azure** virtual machines, implement, and manage virtual networking within **Azure** and connect to on-premises environments and adjusted the application to have it working on **Azure** properly.
- Developed an **Azure**-based high-performance compute environment to support the massive computational requirements of client congressional redistricting Azure application.
- Designed and created multiple deployment strategies using **CI/CD** Pipeline and configuration management tools with remote execution to ensure zero downtime and shortened automated deployments.
- Worked on **Ansible** to trigger **Jenkins** server and used **Jenkins** as an interface for managing credentials that can be retrieved and be injected into the environment where **playbook** runs the scripts.
- Implementing a **CI/CD (Continuous Integration /Continuous Delivery)** framework using **Bamboo, Maven & Artifactory** in Linux environment and Integration of **Maven/Nexus, Bamboo, Bitbucket, Confluence, Jira**.
- Installed and configured **third party systems**, performed System requirements evaluation, security compliance agreement by monitoring the systems and gathering metrics. Developed automated scripts to evaluate and used security hardening.
- Worked in identifying system data, hardware, or software components required to meet user needs, Research, test, or verify proper functioning of software patches and fixes. Performing security analyses of developed or packaged software components.
- Providing technical guidance or support for the development or troubleshooting of systems.
- Perform maintenance and troubleshooting of our enterprise Redhat **OpenShift** systems. Work to continuously improve speed, efficiency, and scalability of **OpenShift** systems.
- Worked with **Chef** Enterprise Hosted as well as On-Premises, Installed Workstation, Bootstrapped Nodes, Wrote Recipes and Cookbooks and uploaded them to **Chef-server**, Managed On-site OS/Applications/Services/Packages using **Chef**.
- **Shell scripting** to automate the maintenance process of the WebLogic Application Server and recover the backed-up WebLogic configuration.
- Developed **PowerShell** script to fetch necessary information from webpages according to the requirement. Extensive **PowerShell** experience developing, implementing, and maintaining automation scripts to meet business needs in large scale, highly available, online production environments.
- Managed **AWS infrastructure** as code using **Terraform**. Used terraform to implement auto scaling, **cloud watch in Jenkins**.
- Hands on experience with **Docker** Management platform, leveraged Custom Docker Images as **Containerized Apps** within the Docker Engine as Multi Stack Application like **LAMP**.
- Worked on **MongoDB** database concepts like locking, transactions, indexes, forwarding, replication, schema design
- Installing the **Splunk** Light Weight Forwarders, Forwarders, Indexers, Search Heads after configuring the files like Output.conf, input.conf etc. Managing Splunk licenses etc.
- Installed **JIRA** and Configured workflows, managed work tickets, installed plugins to optimize the JIRA Ticketing system
- Ability to communicate requirements effectively to team members and manage applications. Provided 24/7 on call support on Linux Production Servers. Responsible for maintaining security on Red hat Linux.
- Highly organized, detailed oriented, able to plan, prioritize work and meet project deadlines also, work well under tight deadlines.
- Excellent communication, interpersonal, intuitive, and analytical and leadership skills with ability to work efficiently in both independent and teamwork environment.

Technical Skills

DevOps Tools	Chef, Ansible, Puppet, Docker, Kubernetes, OpenShift, VMware, Splunk, Terraform
Operating Systems	Sun Solaris 7/8/9/10/11, RHEL/CentOS 5.x/6.x/7, Windows Server 2003/2008/2012
Virtualization	Virtual Box, VMware vSphere 5.5 /6.0
Languages	Java, Shell, Bash, Python
Databases	MySQL, MongoDB, Cassandra, PostgreSQL, SQL Server, DynamoDB.
Web/App Server	Apache, IIS, HIS, Tomcat, WebSphere Application Server, JBoss
Bug Tracking Tools	JIRA.
Version Control Tools	Subversion, GIT, Tortoise SVN, Visual SVN
Web/Programing	Servlets, JDBC, JSP, XML, HTML, .Net, Java Script, Java/J2EE, C, C++, Ruby, Perl scripting, Python, Shell
Monitoring and Alerting tools	Relic, Datadog, ELK Stack, AWS Cloud Watch

Professional Experience

Mastercard (Vancouver, BC, Canada)

Cloud DevOps Engineer

April 2021 – Nov 2021

- Worked in Agile modeled software development life cycle. Experience on Continuous Integration and Continuous Delivery with **AWS** using **Terraform** and **Jenkin**
- Worked with AWS services (**EC2, S3, IAM, Amazon Glacier, EBS, VPC, Elastic Load Balancing, Network Load Balancing, Amazon Cloud Watch, Auto Scaling, Route 53, CloudFront, Lambda Functions, and Cloud Formation**).
- Created monitors, alarms and notifications for EC2 hosts using Cloud Watch.
- Created, tested, and deployed an End-to-End **CI/CD** pipeline for various applications using **Jenkins**.
- Worked with container-based deployments using **Docker**, working with **Docker** images, **Docker** Hub and **Docker**-registries and **Kubernetes**.
- Created private cloud using **Kubernetes** that supports **DEV, TEST** and **PROD** environments.
- Implemented a production ready, load balanced, highly available, fault tolerant, auto scaling **AWS Kubernetes (EKS)** infrastructure and microservice container orchestration.
- Creating clusters using **Kubernetes** and worked on creating many pods, replication controllers, deployments, labels, health checks and ingress by writing **YAML** files.
- Used **Jenkins** and pipelines to drive all micro-services builds out to the **Docker**-registry and then deployed to **Kubernetes**, Created Pods and managed using **Kubernetes**.
- Perform maintenance and troubleshooting of our enterprise Redhat OpenShift systems. Work to continuously improve speed, efficiency, and scalability of OpenShift systems.
- Used **Terraform** in **AWS** cloud services such as **EC2**, auto-scaling and VPC to build secure, highly scalable, and flexible systems that handled expected and unexpected load bursts.
- Configured **AWS** cloud infra as code using **terraform** and continuous deployment through **Jenkins** and automated the cloud formation using **Terraform**.
- Knowledge of **TCP/IP** networking, **SMTP, HTTP**, load-balancers, target groups, highly available network servers
- Involved in Testing, maintain and recommend software improvements to ensure strong functionality and optimization. Independently install, customize and integrate commercial software packages
- Configured, maintained and customized JIRA and Confluence as per the requirements to promote team co-ordination and Ticketing system.
- Installed managed and administered the **Tableau server** and **TSM**, setting up Athena connectors to query data from and integrated with **Active Directory** and added the users form **AD**.
- Planning, installation, configuration, management and troubleshooting of AWS Linux EC2, hands on experience with RPM and YUM package installations, patch and another server management.
- Managing **EBS** Volumes by taking snapshots. Attaching & Detaching **EBS** volumes to **EC2**.

- Configuring and deploying instances on **AWS** environment and Data centers, also familiar with **EC2, Cloud watch, Elastic Search** and managing **security groups** on **AWS**.
- Designed **AWS** Cloud Formation templates to create custom sized **VPC, subnets, NAT** to ensure successful deployment of Web applications and database templates.
- Experienced in Amazon **EC2** setting up instances, **virtual private cloud (VPC)** and **security groups** and Created monitors, alarms and notifications for **EC2** hosts using **Cloud Watch**.
- Used AWS Developer tools such as Code Commit, Code Build, Code Deploy, and Code Pipeline.
- Created Code Pipeline for CI/CD automation using Cloud Formation and acted as a gate keeper for manual approval before deployment in production environment.
- Created **Terraform** modules to create instances in **AWS &** automated process of creation of resources is AWS using **Terraform**.
- Design and implement solutions to automate platform and infrastructure management, including integration with external modules/components that comprises the entire technology infrastructure ecosystems
- Provide highly durable and available data by using **S3** data store, versioning, lifecycle policies, and create Amis for mission critical production servers for backup and configured **S3 bucket** to host static website that includes static content.
- Worked on creation and managing IT infrastructure and application stack using **AWS Cloud Formation** and writing the template file using **JSON and YAML**.
- Wrote **Ansible** playbooks and securing a server with **Ansible** and Provisioning, deployment with **Ansible** and Worked on developing **Ansible** Go Scripts for automating regular tasks and Worked on playbooks for **Ansible** in **YAML** scripting
- Extensively involved in infrastructure as code, execution plans, resource graph and change automation using Terraform. Managed **AWS infrastructure** as code using **Terraform**. Used terraform to implement auto scaling, **cloud watch in Jenkins**.
- Integrated various **Version control tools**, build tools, nexus and deployment methodologies (**scripting**) into **Jenkins** to create an end-to-end **orchestration** build cycles.
- Involved in verifying stability, interoperability, portability, security, or scalability of system architecture and cloud infrastructure. Documenting design specifications, installation instructions, and other system-related information.
- Maintained and customized **JIRA** and **Confluence** as per the requirements to promote team co-ordination and Ticketing system.
- Working with vendor to integrate SNOW and venafi to develop automated processes for IAM/LSTS certs. Working on certificate request fulfilment workflow (on service now) currently uses an API to retrieve credentials from ID vault, which is a manual process converting to automate these steps.
- Installing Third-party/vendor product evaluation and implementation and Integrating SaaS solutions with on-prem infrastructure.
- Work experience in **Azure App & Cloud Services, PaaS, Azure Data Factory, Azure SQL Data Warehouse, Power BI, Azure Blob Storage, Web API, VM creation, ARM Templates, PowerShell scripts, IaaS, Lift & Shift, storage, network and database**.
- Integrated **third party systems** with the on-premises **Active Directory** for the Authorization and Authentication purpose.
- Duties included monitoring and managing performance of ESXi servers and VMs using Virtual center server for HA, DRS, installing and configuring **ProxySG**.
- Worked with **Docker** Management platform, leveraged Custom Docker Images as **Containerized Apps** within the Docker Engine as Multi Stack Application like **LAMP**.
- Worked on **MongoDB** database concepts like locking, transactions, indexes, forwarding, replication, schema design.
- Used Ansible / **Ansible Tower** as Configuration management, to automate **repetitive** tasks, quickly deploy critical applications, and proactively manages change and wrote **Python** Code using **Ansible Python API** to Automate Cloud Deployment Process.
- Implemented **Continuous Integration** by integrating **Maven, GIT, SonarQube, Nexus** with **Jenkins**. Involved in Installing Jenkins on Linux environment and implemented **master – slave** configurations to run multiple build operations in parallel.
- Day to day activities like building and deploying code in different environments like DEV, SIT, UTA, Pre-Prod and Prod using Jenkins, Docker, **Kubernetes** and **ARM, CHEF** and Ansible.
- Automated deployments, scaling, and operations of application containers across **clusters** of hosts, provided container-centric infrastructure by **Kubernetes**.
- Wrote **Ansible playbooks** which is the entry point for Ansible provisioning, where the automation is defined through tasks using YAML format. Run Ansible Scripts to provision **Dev servers**.
- Designing and maintaining production-quality Splunk dashboards. Expert in installing and using **Splunk** apps for Unix and Linux (Splunk nix) & Linux scripting (SH, BASH, KSH).

- Worked as a **DevOps Engineer** for a team that involves different development teams and multiple simultaneous software releases.
- Migrated complex, multi-tier applications on Cloud Platforms. Designing and deploying enterprise-wide scalable operations on Cloud Platforms.
- Experienced in Amazon **EC2** setting up instances, **virtual private cloud (VPC)** and **security groups** and Created monitors, alarms and notifications for **EC2** hosts using **Cloud Watch**.
- Setup **Elastic Load Balancer (ELB)** for distributing traffic among multiple **Web Logic servers** and Involved in deploying the content cloud platform on **Amazon Web Services** using **EC2, S3 and EBS**.
- Launched **LAMP** stacks in multitier AWS instances in different subnets in **Amazon VPC**, attached **ACL's** and Security Groups to maintain high security.
- Installed and configured **Jenkins** for Automating Deployments and providing an automation solution and Integrated **GitLab** into **Jenkins** to automate the code checkout process.
- Created and configured the continuous delivery pipelines for deploying **micro services** and lambda functions using **Jenkins** CI server. Installed and administered **Artifactory** repository to deploy the **artifacts** generated by **Maven** and to store the dependent **jar** used during the build.
- Integrated **Jenkins** with **SVN** source code repository and maintained builds continuously when the developer check-in their code and Managed **Jenkins plugins** for Tests, Reports, Notification, User Authorization and Deployment.
- Coordinate/assist developers with establishing and applying appropriate branching, labeling/naming conventions using **Subversion (SVN)** and **Git** source control.
Administered and Engineered Jenkins for managing weekly Build, Test and Deploy chain, **SVN/GIT** with Dev/Test/Prod Branching Model for weekly releases. Analyzed the static and dynamic code analysis using the **SonarQube** and stored successful builds in binary repositories like **Nexus**.
- Deployed and configured **GIT** repositories with branching, forks, tagging, merge requests, and notifications. Converted and automated builds using **Maven** and **Ant**. Scheduled automated nightly builds using **Jenkins**.
- Deployed applications using **Docker** containers in the cloud with Paas for automated provisioning and deployment, integrated **SVN, Jenkins** and **Chef**.
- Created several scripts/apps to monitor and administer all **docker** containers. Implemented several **Tomcat, JBOSS** Instances by using the **Docker** Engine for running several Containerized AppServers. Worked on **Docker Hub** for sharing and managing application stacks.
- Installed and deployed Docker Engines in Virtualized Platforms for containerization of multiple apps and configure **Docker Swarm** and **Kubernetes**.
- Established **Chef Best practices** approaches to system deployment with tools with **vagrant** and managing **Chef Cookbook** as a unit of software deployment and independently version controlled.
- Creating **manifests and deploying using Puppet** to completely provision the server. Created **Custom Puppet** modules for bootstrapping new servers with required application dependencies and packages.
- Maintained **Puppet servers** and management application that can use **ServiceNow (CI)** data to bring computers into a desired state by managing files, services or packages installed on physical or virtual machines.
- Used **Puppet** to manage Web Applications, Config Files, Data Base, Commands, users Mount Points, Packages. Deployed **Puppet, Puppet Dashboard** and **Puppet DB** for configuration management to existing infrastructure.
- Worked closely with developers to define and configure application **servers**, virtual hosts, web **applications**, web **resources**, back-end resources as well as deployment of EJBs across multiple instances of **WebSphere**.
- Deployed applications (Web-Based) on multiple **WebLogic** Servers and maintained **Load balancing, high availability** and Fail over functionality (**disaster recovery**).
- Involved in building and deploying **EAR/WAR** files with configuration settings. Deployed the archives to Apache Tomcat web server and Web Sphere Application Servers and Configured application servers **JBOSS, WEB LOGIC** to deploy the code for different environments.
- Enabled Security Socket Layer (SSL) by requesting and generating digital certificates for implementation of HTTPS between Plug-in and Application Server.
- Installed, configured and administered Apache web servers and deployed applications on Tomcat Server and maintained Load balancing, High availability and Fail over functionality.
- Experience in configuring monitoring tools like **Zabbix for Network Monitoring, Nagios for System monitoring, Splunk for Application performance monitoring** and monitoring tools like **ELK**.

- Planning, installation, configuration, management and troubleshooting of **Red Hat Enterprise Linux** platform Hands on Experience in Red hat Enterprise **Linux** and Kick start PXE installation.
- Managing User Accounts and Groups, **Managing Files, Directories, Package/Patch Management and Configuration**, Managing **Services, Volume Management**.

CaseWare International (Toronto, ON, CA)

Sep 2016 – Dec 2017

System Administrator

- Responsible for upgrading the Virtual Machines, VMware ESXi hosts and vCenter servers in the organization. Installed and configured Linux virtual machines on VMware infrastructure.
- Release Engineer for a team that involves different **development teams** and multiple simultaneous **software releases**. Defining **Release Process** and **Policy** for projects early in SDLC. Coordinating with Different Project teams on build and release planning and efforts.
- Developed automated process for builds and deployments using **Jenkins, Ant, Maven, Sonatype Nexus, Shell, Python** and **Java**; administered and integrated the **Version Control Systems** like **Subversion** and **Git** with **Jenkins**.
- Designed and implemented automation deployment using to promote major releases, monthly releases, and patches from **Development ->Integration/QA ->Staging/UAT ->Production**.
- Managed and improved build systems and integrated test automation framework, providing support for continuous, nightly and milestone builds across multiple streams of development and assisted developers with the timely resolution of any build failures.
- Imported and managed multiple corporate applications into **SVN** Provided end-users training for all **Rally** users to effectively use the tool.
- Build scripts using **ANT** and **MAVEN** build tools in Jenkins to move from one environment to other environments.
- Worked with DBA team for database performance issues, network related issues on Linux Servers.
- Created New Virtual Machines, cloning VM, DRS and Snapshots, migrated legacy Data stores to VMWare ESXi 5.5 and from **VMWare** to AWS. Administered VMotion for successful VM migration.
- Involved in P2V, V2P Migration using Stand Alone **VMware** Converter Server and Plate Spin. Performed ESX Hosts and Virtual Machine migrations between Development, Integration, and Production environments and across Datacenters.
- Developed **Bash** and **python** scripts for day-to-day administration, modified Kernel parameters to improve the server performance in **Linux**. Creation of Logical volumes (LVM) for Linux operating systems.
- Involved in design, configuration, installation, implementation, management, maintain and support for the Corporate Linux servers **RHEL 4x, 5.x, CENTOS 5.x**.
- Strong experience with the **VMware** HA (High Availability), FT (Fault Tolerance), DRS (Distributed Resource Scheduler, Troubleshooting ESX issues related to storage, network and performance issues
- Maintained proper documentation of all the activities carried out during the project. Configuring and Administering NFS and auto mount in networks.
- Experience configuring, maintaining **NFS, LDAP (PAM), DNS (BIND), DHCP, Kerberos, Apache tomcat, Samba** Servers as per environment's requirements.
- Responsible for building of Linux OS servers using kickstart automation application.
- Set up user and group login IDs, network configuration, password, resolving permission issues. Patch management, package installation/upgrades, and kernel upgrades, done backups using tar and recovering during data loss.
- Schedule jobs with cron and at utility and giving cron eligibility for administrative accounts.
- Coordinating with 24 x 7 on-call support personnel in debugging.
- Writing **shell scripts** for **Automated Back-ups** and **Cron Jobs** using **sh** and **bash**. Installation, Configuration and Management of **NFS, HTTP, FTP, SAMBA, DHCP, DNS** Servers.
- Manage and perform change control and administration on application servers, web servers, LDAP server in company's mission critical production, staging and development environments.
- Troubleshooting **Networking issues** poor routing, network conestion, NIC duplex and speed incompatibilities using ethtool, ifconfig, tcpdump, netstat, ping, telnet etc.

Education

Bachelors in Civil Engineering

2012 June – 2016 May

JNTU Hyderabad