**Sumith T**

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An outstanding, self-motivated professional with 7 years of experience in the field of IT, focused on **Linux** and **System Administration** with a major focus on **Cloud Provisioners (AZURE, AWS), Configuration Management, Continuous Integration/Delivery (CI/CD), Build and Release Management, Virtualization technologies** which also includes Troubleshooting Performance issues and all aspects of **Software Development Life Cycle (SDLC).**

* Expert in various **Azure** services like **Compute** (**Web Roles, Worker Roles), Caching, Azure SQL**, **NoSQL**, **Storage**, and **Network** **services**, **Azure Active Directory, API Management,** **Scheduling**, **Azure** **Autoscaling**, PowerShell Automation, **Azure Virtual Machines**, Azure search, **Azure DNS**, **Azure VPN** Gateway, and Notification hub
* Expertise in **SaaS**, **PaaS** and **IaaS** concepts of cloud computing architecture and Implementation using **AWS**, **Azure,** **Pivotal Cloud Foundry [PCF]** and **migrating** on-premises applications to Cloud and orchestrated cloud infrastructure using **Terraform**, **CloudFormation** and **Azure** Resource Manager (**ARM**) templates.
* Worked with **Terraform** Templates to automate the **Azure Iaas** virtual machines using terraform modules and deployed virtual machine scale sets in production environment and created **Terraform** templates for provisioning virtual networks, subnets, VM Scale sets, Load balancers and NSG rules and used **Terraform graph** to visualize execution plan using the graph command.
* Extensive knowledge of **Azure**-based **disaster recovery**, **business continuity solutions**, **backup functionality** and worked with **PowerShell 3.0** on **windows server 2012/2008 r2** environments.
* Used **Jenkins** as Code Deploy plugin to deploy to **Azure** and extensively worked on other tools like Bamboo, Hudson, and Cruise Control for **continuous Integration**.
* Experience in **Architecting** and securing the **Infrastructure** on **AWS** using **IAM**, **KMS**, **Cognito**, **NACLs, API Gateway**, **CloudTrail**, **Cloud Watch**, **SQS, SNS**, **Config**, **EMR**, **AWS** **Kinesis**, **Lambda**, **Elastic Beanstalk**, **Redshift,** and **CloudFormation**.
* Experience in designing and deploying multiple applications utilizing almost all the **AWS** stack (Including **EC2, Route53, S3, RDS, Dynamo DB, SNS, SQS, IAM**) focusing on **high-availability**, **fault tolerance**, and **Autoscaling** in **AWS CloudFormation** with the help of **Jenkins AWS** Code Deploy plugin.
* Experience in writing CloudFormation templates to **automate AWS environment** creation along with the ability to **deployment on AWS**, using **build scripts** (AWS CLI) and **automate** solutions **using Shell and Python.**
* Expertise in integrating **Terraform with Ansible**, **Packer** to create and versionthe **AWS Infrastructure**, designing, automating and implementing of **Amazon machine images** across the **AWS Cloud environment** with infrastructure as code manner.
* Experience in architecting solutions for **Implementation of micro-services,** **Developer Productivity**, **Operator Efficiency**, **Comprehensive Security** and **High Availability** in **Pivotal Cloud Foundry (PCF)**.
* Application Deployments, Orchestration, Automation using **Ansible**. Experienced in Cloud automation using **AWS** Cloud Formation templates and stacks.
* Experience in designing and deploying container-based production clusters using **Docker, Kubernetes, Docker Swarm, Docker compose, Docker file, OpenShift**, **EKS** and **AKS.**
* Experience in the orchestration of **Docker Containers** using **Kubernetes** by creating whole master and worker nodes. Installed **GlusterFS** on-top of **Kubernetes** for dynamic PVC provisioning.
* Experience in Building and deploying the application code using **CLI** of **Kubernetes** called **kubectl**, **kubelet**, **kubeadm, Kubespray** and Schedule the jobs using **Kube-scheduler**. Scale, load balance and manage Docker containers with multiple namespace Versions using **Kubernetes**. Managed **K8s** charts using **Helm** and created reproducible builds of the **Kubernetes** applications.
* 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. (Ex: tomcat server)
* Provisioned EC2 instances, configured **auto-scaling** and defining cloud formation JSON templates using **Ansible modules.**
* Extensively worked on creating **Chef Recipes**, **Chef Roles**, **Templates**, **Attributes**, **Cookbooks** and testing of **Cookbooks** using **Food Critic**, **Test Kitchen** & running recipes on nodes managed by on-premise **Chef Server**.
* Experienced in build, design and maintain the platform automation using **Chef** and Involved in setting up **Chef Workstation, Nodes, Cookbooks, and Recipes** using **Ruby Scripting** and familiar with **Knife** in chef.
* Experience in creating **Puppet** **Manifests** & **Modules** to automate system operations. Installed configurations of **Puppet Agent**, **Puppet Master** and deployed **Puppet Dashboard**, **Puppet DB** for configuration management to existing infrastructure and developed the Puppet manifests creation, testing, and implementation.
* Experienced in **OpenShift** and **Rancher** platform in managing Docker Containers, Kubernetes Clusters and implemented a production ready, load balanced, highly available, fault-tolerant **Kubernetes** infrastructure and created **Jenkins jobs** to deploy applications to **Kubernetes Cluster**.
* Expert in an Orchestration & Migration of **CI/CD** processes using **CloudFormation**, **Terraform** Templates & Containerization of Infrastructure using **Docker**, which was set up in **Vagrant**, **AWS**, and **VPC**’s.
* Experienced in building **Jenkins pipelines** using various tools like **Maven, Nexus** to drive all **Microservices** builds out to the **Docker registry** and then deployed to **Kubernetes**.
* Experience in writing **Jenkins** Pipeline Groovy Scripts for Continuous Integration and built workflows also used **Jenkins** for uploading Artifacts into the **Artifactory** and automated various day-to-day administration task by developing **Bash, Ruby, JSON, Perl, PowerShell** and **Python** Scripts.
* Experienced in authoring **pom.xml, build.xml** files performing releases with the **Maven**, **ANT** and **Gradle** release plugin, and managing artifacts in **sonatype** **NEXUS**, **JFrog Artifactory**.
* Experienced in branching, tagging and maintaining the version across the environments using **SCM** tools like **Git**, **GitHub**, **GitLab**, **Bitbucket**, **Subversion** (SVN), **Perforce** and **TFS** on Linux and Windows platforms.
* Skilled in monitoring servers using **Nagios**, **Splunk**, **Prometheus**, **Grafana, Dynatrace, Datadog**, **AppDynamics**, **New Relic**, and **CloudWatch** for Resource & Network Monitoring and **ELK, EFK** for Log Trace Monitoring.
* Expertise in working with web servers such as **Apache HTTP server**, **NGINX, Apache TOMCAT**, application servers such as Oracle WebLogic 9.x/10.x, IBM WebSphere 6.x/7.x/8.x, JBoss 4.1 and databases like **Oracle, MySQL, MongoDB, DynamoDB, PostgreSQL, Cassandra.**
* Experience in **LDAP** authentication and set up external authentication using **WSO2IS, OKTA**, **Active Directory** and **IPA** servers and monitored **CRON** jobs that were scheduled by the development team. Managed network related services like **TCP/IP**, **FTP**, **SSH**, **DNS**, **VPN**, **SMTP**, **DHCP**, **NIS**, & other Network Services.
* Experience in provisioning for Adobe Experience Manager (**AEM**) and installing **RHEL**, **JDK**, **JBOSS**, configuring **JVM** parameter, replication agents, flush agents for Author, Publisher and Dispatcher.
* Experience in defect management systems **Remedy**, **JIRA**, **Service now** and Knowledge of testing frameworks **Junit**, **Selenium**.
* Experience in the documentation for cross-platform teams using **SharePoint**
* Experience in all phases of the Software development life cycle (**SDLC**) with focus on the build and release of the quality software. In-depth understanding of the principles and best practices of Software Configuration Management in **Waterfall model** and **Agile Methodology** (**Scrum** and **Kanban**).

**TECHNICAL SKILLS**

|  |  |
| --- | --- |
| **Cloud** | Microsoft Azure, Amazon Web Services, PCF, OpenStack. |
| **Container Tools** | Docker, Docker Compose, Kubernetes, OpenShift, Rancher |
| **Version Control Tools** | GIT, GITHUB, SVN, Perforce, Bitbucket. |
| **Deployment Tools** | Puppet, Chef, Ansible. |
| **Web/Application Servers** | JBOSS 4.x/5.x, Apache Tomcat, Nginx, Ingress Controller, Web Sphere, Web Logic, |
| **Monitoring Tools** | Nagios, Splunk, Dynatrace, ELK, EFK, Datadog, Grafana, Prometheus |
| **Testing & Ticketing Tools** | Selenium, SonarQube, Jira, ServiceNow, Junit, JMeter |
| **CI & Build Tools** | Bamboo, Hudson, Jenkins, Maven, Ant, Gradle, AnthillPro |
| **Scripting Languages** | Bash/Shell, Ruby, Python, PHP, Perl, JavaScript, PowerShell, JSON, Groovy, YAML. |
| **Languages** | C, C++, C#, .Net, Java |
| **Database** | My SQL, Oracle, Dynamo DB, Mongo DB, Cassandra. |
| **Repository Management** | Nexus, Jfrog Artifactory |
| **Virtualization** | VMware ESX/ESXi, Windows Hyper-V, Power VM, Vagrant, Virtual box. |
| **Operating System** | Red Hat Linux 7/6/5/4, Ubuntu 16/14/13/12, Debian, Fedora, CentOS, Windows 10/8/7/Vista/XP, Solaris 11/10/9/8, Mac OS. |
| **Networking/protocol** | TCP/IP, DNS, NFS, ICMP, SMTP, DHCP, OSPF, BGP, UDP, and RIP. |

**PROFESSIONAL EXPERIENCE**

**Sr. Cloud/DevOps Engineer**

**Nike, Beaverton, OR Feb 2018 – Present**

**Responsibilities:**

* Worked with Amazon AWS Cloud Services**, (EC2, ECS Fargate, ALB, VPC, Route53, IAM, Cloud Watch, Elastic IP, RDS, SNS, SQS, Cloud Formation, , API Gateway, Lambda, DynamoDB)** and managing security groups, Target groups on AWS, focusing on **high-availability, fault tolerance, and auto-scaling.**
* Monitored and maintained the **AWS** **S3** **buckets** which contained all the packets of each build. Each packet had metadata files which were extracted to proceed with the flash testing.
* Experience with **IAM**requirements for cloud - based services, including strategies, trust models, and open standards, encryption, etc. used to improve **manageability, access governance, provisioning, information security, and privacy.**
* Configured and maintained the **AWS Lambda function** to trigger when there is a **Jenkins** build kicked off, which internally gets stored on **AWS S3 bucket** for everybody to access. Created **Route53** to route traffic between different regions. Worked with **Security groups** & **Network ACLs.**
* Experience with designing and configuring secure **Virtual Private Cloud (VPC)**through private and public networks in AWS by creating various **subnets, routing table, Network ACL, NAT gateways**.
* Used Amazon **Route53**to manage DNS zones and give public **DNS names**to **elastic load balancers**
* Implemented a **'server less'** architecture using **API Gateway, Lambda, and Dynamo DB** and deployed **AWS Lambda code** from Amazon S3 buckets. Created a Lambda Deployment function and configured it to receive events from your S3 bucket.
* Created functions and assigned roles in **AWS Lambda** to run python scripts, and AWS Lambda using botoflask to perform event driven processing.
* REST API Design using Swagger and API Management AWS API Gateway. Built micro services using API gateway.
* Integrated AWS **Dynamo DB** using AWS lambda to store the values the items and backup the Dynamo DB streams and implemented **Terraform** modules for deployment of applications across multiple cloud providers.
* Worked with many other parallel **DevOps** teams inside the company that involved a huge cluster of **Continuous** **Integration** Systems which involved many channels of the existing servers.
* Involved in Developing a Restful service using **Python Django** framework and created an entire application using **Python Django, MySQL, and Linux**.  Implemented **SQL Alchemy (ORM)** which is a **Python library** for complete access over **SQL** as Python objects.
* Expertise in troubleshooting issues regarding the **repo-sync**, monitoring of build issues, code committing issues with **Gerrit** and Phabricator. Responsible for successful migration of **Flash** testing codes from **Gerrit** **server** to internal **GIT** **server**.
* Integration of user-facing elements developed by front-end developers with serverside logic and Added user validations and user permissions by using the **Node.JS**.
* Worked on **Docker**container snapshots, attaching to a running container, removing images, managing directory structures and managing containers, creation of custom **Docker container images**, tagging and pushing the images to the **Docker repository** for further use and managed a Docker deployment pipeline for custom application images in the cloud using **Jenkins**.
* Experience working on several docker components like **Docker Engine**, **Hub**, **Machine**, **Compose**and **Docker Registry**, creating docker images and handling multiple images primarily for middleware installations and domain configurations.
* Experienced in Using Jenkins pipelines to drive all Microservices builds out to the **Docker registry** and then deployed to Elastic Container Service.
* Worked with **Terraform**to create stacks in **AWS**from the scratch and updated the **terraform** as per the organization’s requirement on a regular basis.
* Created templates for **AWS infrastructure** as a code using **Terraform** to build staging and production environments.
* Developed build used **Maven** as **build tools** and used **CI tools** to kick off the builds move from one environment to other environments. Working with setting up of **Continuous Integration** processes with build, release, and test. Utilized internal tools and **Jenkins** tools to perform and implement Continuous Integration processes.
* Experience in using **Git webhooks**and Poll SCM with Jenkins to automate **Jenkins**tasks and responsible for writing **groovy**scripts for **Jenkins pipelines.**
* Migration of the Source Code from **Perforce** to **Bitbucket**. Responsible for design and maintenance of the **GIT Repositories**, views, and the access control strategies Used sub modules in **GIT** and trained the new users on working with sub modules in **GIT**.
* Interacted with developers and Enterprise Configuration Management Team for changes to best practices and tools to eliminate non-efficient practices and bottlenecks.
* Handled production support issues as they arise and participated in a 24/7 on-call rotation.
* Used Jira as an Issue tracking tool.

**Environment:** *AWS (EC2, EBS, S3, VPC, Code Deploy, Code Commit, Elastic search, Lambda, API Gateway, Route 53 (DNS), ECS, CloudFormation, RDS, Dynamo DB, SNS, SES, SQS, IAM, RedShift, Ops Works), Maven, Chef, Ansible, Docker, Kubernetes, OpenStack (kilo/ Juno), Jenkins, GIT, Bit-Bucket, Python, Jira.*

**Sr. Cloud/DevOps Engineer**

**WellCare, Tampa FL Aug 2018 – Jan 2020**

**Responsibilities:**

* Created **Azure** **Automation** **Assets**, Graphical runbooks, **PowerShell** runbooks that will automate specific tasks, deployed **Azure** **AD** **Connect**, configuring **ADFS** authentication flow, **ADFS** installation using **Azure AD Connect**.
* Deployed **Azure IAAS, PAAS VM’s** in **Master Slave Architecture** into **ARM** templates and **Cloud services (PaaS role instances)** into secure **VNets** with **Azure** Internal Load Balancer and subnets.
* Created and implemented **ARM** **templates** and deployed them using the Azure portal, also used **Azure** **quick** **start** templates for **Cloud Infrastructure** **design** and implementation to Deploy Web applications on **Azure PowerShell**.
* Created and configured **HTTP** Triggers in the **Azure Functions** with Application insights for monitoring and performing load testing on the applications using the **VSTS**.
* Used **Python API** for uploading all the agent logs into **Azure** blob storage. Managed internal deployments of monitoring and alarm services for the **Azure Infrastructure (OMS).**
* Implemented Office 365 and **Azure** **Active Directory** for single sign-on, authentication, authorization, and **Azure** **Role-based Access Control (RBAC).**
* Established **SSO** connections using **SAML 2.0** and **OAuth 2.0** protocols in the AD and provided high availability for **IaaS VMs** and **PaaS** role instances for access from other services in the VNet with **Azure** Internal Load Balancer.
* Implemented Micro-services using **Pivotal Cloud foundry** platform build upon Spring Boot Services and created workflows on **TeamCity** for setting up automated pipelines for **CI/CD** with **PCF**.
* Experience in using **PCF Ops Manager** **Build pack** and **Docker** to deploy and manage cloud foundry. Integrated **Active Directory Federation service (ADFS)** with PCF for SSO.
* Developed custom **OpenShift** templates to deploy the applications and to create the **OpenShift** objects build, deployment configs, services, routes, and persistent volumes.
* Created **terraform** templates for provisioning virtual networks, subnets, VM Scale sets, Load balancers and **NAT** rules and used **terraform** graph to visualize execution plan using the graph command.
* Configured the **Kubernetes** provider with **Terraform** which is used to interact with resources supported by **Kubernetes** to create several services such as Config Map, Namespace, Volume, Auto scaler, etc.
* Configured Automation with Centralized Management using **Ansible** and **Cobbler**. Implemented **Ansible** to manage existing servers to automate the build/configuration of new servers
* Wrote **Ansible** playbooks, inventories, created custom playbooks written in **YAML** language, encrypted the data using **Ansible** **Vault** and maintained role-based access control by using **Ansible** **Tower**.
* Worked for the application team in doing **orchestration** and automated application deployments using **Ansible**.
* Implemented **Chef** recipes to automate **Orchestration** of **Cassandra clusters** and worked on upgrading **Cassandra** from old **2.x to 3.0** version and to set up the Continuous Delivery pipeline with **Jenkins**, **SonarQube**, **Vagrant** infrastructure to run these packages and various supporting software components such as **Maven**.
* Installed, deployed, and configured Chef Server Enterprise on-premise workstation. Bootstrapped the nodes using **Knife** and automated by testing **Chef recipes** and **cookbooks** with **test-kitchen** using different drivers **Docker**, **Vagrant** etc. with **Chef-Zero** and **Chef-Solo** in different platforms before sharing them in Chef-Server.
* Worked with **Docker** container snapshots, attaching to a running container, removing images, managing directories structures and managing containers.
* Managed **Kubernetes** charts using **Helm**. Created reproducible builds of the **Kubernetes** applications, templatize **Kubernetes** manifests, provide a set of configuration parameters to customize the deployment and Managed releases of Helm packages.
* Design, develop, Architect and Implement **Azure DevOps** Includes **Deploying, Managing** and **Monitoring Azure Cloud** Applications. DevOps cycles to reduces implementation time life cycles with benefits of increase ROI and performance Azure Portal, VSTS, GIT and DevOps project service **continuous integration** and **continuous delivery** CI/CD.
* Built end to end **CI/CD** Pipelines in **Jenkins** to retrieve code, compile applications, perform tests and push build artifacts to **Nexus** and **UDeploy** to orchestrate changes across servers and components.
* Set up **Jenkins** server and build jobs to provide Continuous Automated builds based on polling the **Git** source control system during the day and periodically scheduled builds overnight to support development needs using **Jenkins, Git,** and **Maven**.
* Deployed new **Splunk** systems and monitor Splunk internal logs from the monitoring Console (MC) to identify and troubleshoot existing or potential issues.
* Replaced **Splunk** logging and analytics with an automated **ELK** cluster, increasing data capture capacity and reducing costs.
* Installed and configured **ELK** stack in legacy and pipelined application logs from App Server to Elastic search through **Logstash**.
* Worked on the monitoring tools and visualization tools like **Prometheus and** **Grafana** and monitoring the **Kubernetes** pod metrics in regular intervals of time.
* Defined and managed release and branching strategy of **GIT** servers. Also, helped educate engineering community on the appropriate use of **GIT**. As well as Implemented auto environment creation using **Ansible** and **Azure**.
* Worked with **MAVEN** for building the application, has written maven scripts and shell scripts to automate the build process. Daily maintenance of **GIT** source repositories and builds.
* Using **Ruby, PowerShell,** and **Python** scripting, **Azure** **ARM** templates developed automation and deployment.
* Created **Azure PowerShell** script for APIM backup and restore operations. Created several **SQL** scripts as part of bug fixes to provide immediate solutions for some of the common issues on **Windows** machines.
* Contributed towards the security model in the .**NET** framework for the administration module using **Windows** **Authentication** based on role-based security.
* Securing **MongoDB** using authentication and **configuring**, implementing and supporting High Availability with **Load** **balancing** (sharding) cluster of **MongoDB** having TB’s of data
* Setup **Nginx**, **HTTP** web server as a reverse proxy to critical applications such as **Jira**, **Jenkins**, and **IBM** **WebSphere** Application Server.
* Responsible for installing, updating, diagnosing and troubleshooting the issue tracking and project management application, learning agile methodology by **JIRA**.
* Supported infrastructure consisting of **Windows 2008R2/2012R2/2016** servers**.** Configuration, administration of **Windows** OS on Standalone servers using Group Policy Objects, OS patch management (SCCM, WSUS) toolsets.

**Environment:** *Microsoft Windows AZURE, Azure AD, Azure SQL, Azure Network, Web Applications, Kubernetes, Virtual Machines, Aws, Ansible, Chef, Jenkins, Puppet, Docker, Python, Power shell, MongoDB, Microsoft Azure Storage, Windows*

*2008R2/2012R2/ 2016 servers.*

**Cloud/DevOps Engineer**

**Lease Accelerator INC, Reston, VA Jan 2018 – July 2018**

**Responsibilities:**

* Worked with Amazon AWS Cloud Services**, (EC2, S3, EBS, ELB, Cloud Watch, Elastic IP, RDS, SNS, SQS, Glacier, IAM, VPC, Cloud Formation, Route53)** and managing security groups on AWS, focusing on **high-availability, fault tolerance, and auto-scaling.**
* Monitored and maintained the **AWS** **S3** **buckets** which contained all the packets of each build. Each packet had metadata files which were extracted to proceed with the flash testing.
* Configured and maintained the **AWS Lambda function** to trigger when there is a **Jenkins** build kicked off, which internally gets stored on **AWS S3 bucket** for everybody to access. Created **Route53** to route traffic between different regions. Worked with **Security groups** & **Network ACLs.**
* Managed data warehouse using **Amazon RedShift** to analyze all data using **SQL** & existing business intelligence tools. Converted existing **AWS** infrastructure to serverless architecture (**AWS** **Lambda, Kinesis**) deployed via **Terraform** & **AWS** **Cloud formation.**
* Integrated AWS **Dynamo DB** using AWS lambda to store the values the items and backup the Dynamo DB streams and implemented **Terraform** modules for deployment of applications across multiple cloud providers.
* Configured **AWS** Identity and Access Management (**IAM**) Groups and Users for improved login authentication. Provided policies to groups using policy generator and set different permissions based on the requirement along with providing **Amazon Resource Name** (**ARN**).
* Worked with many other parallel **DevOps** teams inside the company that involved a huge cluster of **Continuous** **Integration** Systems which involved many channels of the existing servers.
* Involved in Developing a Restful service using **Python Django** framework and created an entire application using **Python Django, MySQL, and Linux**.  Implemented **SQL Alchemy (ORM)** which is a **Python library** for complete access over **SQL** as Python objects.
* Expertise in troubleshooting issues regarding the **repo-sync**, monitoring of build issues, code committing issues with **Gerrit** and Phabricator. Responsible for successful migration of **Flash** testing codes from **Gerrit** **server** to internal **GIT** **server**.
* Worked on **Docker**container snapshots, attaching to a running container, removing images, managing directory structures and managing containers, creation of custom **Docker container images**, tagging and pushing the images to the **Docker repository** for further use and managed a Docker deployment pipeline for custom application images in the cloud using **Jenkins**.
* Experience working on several docker components like **Docker Engine**, **Hub**, **Machine**, **Compose**and **Docker Registry**, creating docker images and handling multiple images primarily for middleware installations and domain configurations.
* Experience in working with Jenkins in a Docker container with EC2 slaves in Amazon AWS cloud environment and also familiar with surrounding technologies such as Mesos (Mesosphere) and **Kubernetes.**
* Leaded **Kubernetes** charts using Helm. Created reproducible builds of the Kubernetes applications, Kubernetes manifest files and releases of Helm packages.
* Experienced in Using Jenkins pipelines to drive all Microservices builds out to the **Docker registry** and then deployed to Kubernetes, Created Pods and managed using **Kubernetes**
* Installed and used **Chef** Server enterprise on-premise, workstation and bootstrapped the nodes using **Knife** command. Created various **Roles** & **Environments** & used **Chef Handlers** for auto kick-off requirement jobs.
* Implemented **Chef** **Recipes** for Deployment on build on internal Data Centre Servers. Also re-used and modified same Chef **Recipes** to create a Deployment directly into **Amazon EC2** instances.
* Deployed & configured **Chef server** & **Chef solo** including bootstrapping of client nodes for provisioning; Managed & configured hundreds of servers using **Chef**. Written several **Chef Cookbooks** & **Recipes** with **Ruby** scripting to automate the installation of WebLogic domain & **JDK** & customized **Recipes** from **Chef Supermarket** to align.
* Created and Maintained **Chef Recipes** and **cookbooks** to simplify and expedite deployment of applications and mitigate user error. Migration of all nodes from **ansible** configuration system to **Chef system.**
* Developed build used **Maven** as **build tools** and used **CI tools** to kick off the builds move from one environment to other environments. Working with setting up of **Continuous Integration** processes with build, release, and test. Utilized internal tools and **Jenkins** tools to perform and implement Continuous Integration processes.
* Design an **EFK** system to monitor and search enterprise alerts. Installed, configured and managed the **EFK** **Stack** for **Log** **management** within EC2 / Elastic Load balancer for Elastic Search. Monitored performance of the applications and analyzed log information using **EFK (Elasticsearch, Fluentd, Kibana).**
* Migration of the Source Code from **Perforce** to **Bitbucket**. Responsible for design and maintenance of the **GIT Repositories**, views, and the access control strategies Used sub modules in **GIT** and trained the new users on working with sub modules in **GIT**.
* Developed and scheduled bash shell scripts for various activities (deployed environment verification, running database scripts, file manipulations**.** Worked with different bug tracking tools like **JIRA, IBM Clear Quest**.
* Experience with **Red Hat Linux kernel**, memory upgrades, and swaps area. Installed **RedHat Linux**using **Kickstart** & **Sun Solaris** with **JumpStart**. Configured **DNS, DHCP, NIS, NFS** in **Sun Solaris 8, 9** & other Network Services.
* Supported **300+ Linux servers** in production/stage/development environment. Built and **Configured LINUX Servers** in AWS Cloud Environment.

**Environment:** *AWS (EC2, EBS, S3, VPC, Code Deploy, Code Commit, Elastic search, Lambda, API Gateway, Route 53 (DNS), ECS, CloudFormation, RDS, Dynamo DB, SNS, SES, SQS, IAM, RedShift, Ops Works), Maven, Chef, Ansible, Docker, Kubernetes, OpenStack (kilo/ Juno), Jenkins, GIT, Bit-Bucket, Python, Jira.*

**Cloud/ DevOps Engineer**

**Principal Financial Group, Raleigh, NC July 2017 – Dec 2017**

**Responsibilities:**

* Designed the data models to use in **AWS Lambda** applications which are aimed to do complex analysis creating analytical reports for **end-to-end traceability** and definition of Key Business elements from **Aurora**.
* Configured **AWS IAM** and **Security Groups** in **Public** and **Private Subnets** in **VPC,** managed **IAM** accounts (with **MFA**) and **IAM** policies to meet security audit & compliance requirements.
* Utilized **CloudWatch** to monitor resources such as **EC2**, **Amazon RDS DB** services, **EBS** volumes, to set alarms for notification or automated actions, and to **monitor logs** for a better understanding and operation of the system.
* Used **Terraform** templates to deploy the infrastructure using **Chef** for different environments and automated several AWS services like **ELB**, **CloudFront**, **SQL-NOSQL** Databases, **S3,** and **Database security**.
* Experience in Migrating a production infrastructure into an Amazon Web Services utilizing **AWS Cloud formation**, **Code Deploy, Code Commit, Chef, EBS** and **OpsWorks.**
* Worked on **AWS OpsWorks** in integration with **Chef** Configuration management tool to maintain infrastructure and Configured **S3** to host static web content and deployed cloud stack using **AWS Opswork**
* Handled migration of on-premises applications to the cloud and created resources in the cloud to enable this and expert in deploying of **OpenStack** on **AWS** platform.
* Designed, installed and implemented the **Ansible** configuration management system and used **Ansible** to manage **Web apps**, **Cloud Provisioning**, **environment configuration** files, **users,** and **packages**.
* Created **playbooks** for **OpenStack** deployments and bug fixes with **Ansible**. Deployed and tested playbooks in **Docker** containers before pushing changes in **Git**.
* Integrated **Ansible** with **Jenkins** to provide automation, **continuous integration** through **Jenkins** and Implemented **Jenkins Workflow** and Plugins for repeatable deployments of **multi-tier** applications, **artifacts,** and services to **Docker.**
* Wrote **Chef Cookbook/Recipes** using **Chef Resources**, **Ruby DSL**, **Chef Handlers Report** and **Exception**, **Test Kitchen**, **ChefSpec,** and **Vagrant**.
* Maintained automated environment using **Chef Recipes** & **Cookbooks** within **AWS** and involved in **Knife** and **Chef Bootstrap process**, converted production scripts to **chef recipes** and **AWS** server provisioning using **chef recipes**.
* Deployed and managed many servers utilizing both **traditional** and **cloud-oriented** providers with the **Chef Platform** and wrote **cookbooks** for various **DB** configurations to modularize & optimize project configuration.
* Created additional **Docker** Slave Nodes for **Jenkins** using custom **Docker Images** and pulled them to Cloud. worked on all major components of Docker like **Docker Daemon**, **Hub**, **Images**, **Registry**.
* Implemented a load balanced, highly available, fault tolerant, auto-scaling **Kubernetes** **AWS** infrastructure and **microservice** container orchestration.
* Leveraging **kops** implemented a **Kubernetes** Container Orchestration solution within **AWS** allowing for easy management, creation, and recovery of **AWS assets**.
* Used **MAVEN** as a build tool on **java** projects and written maven **POM** files from scratch for multi-modules projects for the development of build artifacts on the source code.
* Installed and configured **Zookeeper** as a service discovery tool and process orchestrator for **ActiveMQ** Level DB replication persistent adapter.
* Designed an **ELK** system to monitor and search enterprise alerts and configured **ELK** stack in conjunction with **AWS** and using Logstash to output data to **AWS S3**. Terminated SSL on to **Nginx** to remove overhead on **API** servers.
* Created **Chef Recipes** to provision **Apache Web servers**, **Tomcat servers**, **Nginx** and **Apache Spark**.
* Integrated **Jenkins CI** with **GIT** version control and implemented continuous build based on check-in for various cross functional applications and created **GitHub Webhooks** to setup triggers for commit, push, merge and pull request events.
* Automated **Datadog** Dashboards with the stack through **Terraform** Scripts. Configured **CloudWatch** and **Datadog** to monitor real-time **granular metrics** of all the **AWS** Services and configured individual dashboards for each resource Agents.
* Developed and Implemented Performance Automation Test Framework base functions by writing Python scripts using **AWS Python SDK Boto3** to configure, manage, deploy and automate most of the Amazon Web services.
* Maintained **LVM**, **VxVM** and **UCD** file systems along with **NFS** and Configured **Kickstart** servers to install **Red Hat Linux** and **VMWare ESX** on multiple machines.

**Environment:** *AWS (EC2, EBS, S3, VPC, Code Deploy, Code Commit, Elastic search, Lambda, API Gateway, Route 53 (DNS), ECS, CloudFormation, RDS, Dynamo DB, SNS, SES, SQS, IAM, RedShift, Ops Works), Maven, Chef, Ansible, Docker, Kubernetes, OpenStack (kilo/ Juno), Jenkins, GIT, Python, Datadog, Jira.*

**DevOps Engineer**

**CVS Health, Woonsocket, RI Jan 2017 – June 2017**

**Responsibilities:**

* Performed the automation deployments using **AWS** by creating the **IAM**s and used the code pipeline plugin to integrate **Jenkins** with **AWS** and created the **EC2** instances to provide the virtual servers.
* Provided highly durable and available data by using **S3** data store, **versioning**, **lifecycle policies**, and create **AMI**s for mission-critical production servers for backup.
* Worked with **Knife** command line tool for creating **Recipes**, **Cookbooks**, **bootstrapping** nodes and worked with **chef supermarket**.
* Involved in many different concepts of **Chef** like **Roles**, **Environments**, **Data Bags**, **Knife**, and **Chef Server** Admin/Organizations. Written **Chef Recipes** to automate build/deployment process and data bags in Chef for better environmental management.
* Tested Chef Cookbook modifications on cloud instances in **AWS** and using **Test Kitchen** and **Chef Spec**, wrote several **Chef Cookbooks** for various **DB** configurations to modularize and optimize product configuration and **AWS** server provisioning using **Chef Recipes**.
* Implemented a Continuous Delivery pipeline with **Docker**, **Jenkins** and **GitHub**. Whenever there is a change in **GITHUB**, our Continuous Integration server automatically attempts to build a new **Docker** container from it.
* Responsible for installation & configuration of **Jenkins** to support various **Java builds** and Jenkins plugins to automate continuous builds and publishing **Docker Images** to the **Nexus Repository**.
* Implemented **Docker -maven-plugin** in and Maven **POM** to build **Docker Images** for all **microservices** and later used Docker file to build the **Docker Images** from the **java jar files**.
* Used **Git** for source code version control and integrated with **Jenkins** for **CI/CD** pipeline, code quality tracking and user management with build tools **Maven** and written **Maven pom.xml** build script.
* Worked with the **OpenShift Enterprise** which allows developers to quickly develop, host and scale applications in a self-managed cloud environment.
* Worked on **NoSQL** database **MongoDB** to replica setup and sharding. Also experienced in managing replica set. Installed, Configured, and Managed **Monitoring Tools** such as **Nagios** for Resource/Network Monitoring.
* Wrote **Shell Scripts** for system applications, Application **monitoring**, Data feeds files transfers & log file analysis.
* Used **Selenium** for continuous inspection of code quality and to perform automatic reviews of code to detect bugs. Automated **Nagios** alerts and email notifications using Python script and executed them through **Chef**.
* Installed, configured and maintained web servers like **Apache Web Server** and **WebSphere Application Server** on **Red Hat Linux**.
* Performed configuration of standard Linux and network protocols, such as **SMTP**, **DHCP**, **DNS**, **LDAP**, **NFS**, **SMTP**, **HTTP**, **SNMP**.

**Environment:** *AWS (EC2, S3, Route 53, EBS, Security Group, Auto Scaling, and RDS), GIT, Chef, Docker, Selenium, Maven, Jenkins, ANT, Python, Jira, Nagios.*

**Build and Release Engineer**

**Progressive, Cleveland, OH March 2016 – Dec 2016**

**Responsibilities:**

* Involved in creating **Bamboo** pipeline jobs for **Puppet** release process for module deployment, using the Agile methodology for **puppet** development.
* Wrote **Puppet** models for installing and managing **java versions** and took the sole responsibility to maintain the **CI Bamboo** server.
* Developed scripting in **Python** using **Puppet** to deploy and manage Java applications across Linux servers.
* Written **Manifests/Modules** for Installation and Updating of **Yum** repositories on the Server using Puppet Infrastructure and to the automate configuration of a broad range of services like **LAMP** Stack, **HTTP** multiple Vhosts management.
* Installed and administered repository to deploy the artifacts generated by **ANT** and to store the dependent jars, which were used during the build.
* Used **ANT** as a build tool in java projects for the development of build artifacts on the source code. Involved in editing the existing **ANT** files in case of errors or changes in the project requirements.
* Administered and Implemented **CI** tool **Bamboo** for automated builds migrated all projects from **perforce** to **subversion**.
* Configured and maintained **Bamboo** to implement the CI and integrated the tool with **ANT** to schedule the builds.
* Responsible for automated Scheduled Builds/Emergency Builds and Release using **ANT** scripts for an Enterprise application (**J2EE**).
* Managed user authentication and authorization for the users in both **Subversion** & **Perforce**. Created branches, performed merges in version control systems **SVN** and **Perforce**.
* Responsible for maintaining Version Control Repositories, User Management in **SVN**. Involved in Branching and Merging of the code in Tortoise **SVN**.
* Performed all the build and release management activities for this project by administrating and integrating Source Code control systems like **SVN** and **Perforce** into build system like **AnthillPro**.
* Used **Nagios** as a monitoring tool to identify and resolve infrastructure problems before they affect critical processes and worked on Nagios Event handlers in case of an automatic restart of failed applications and services.
* Installed, upgraded and configured **Linux Servers** using **Kickstart** as well as manual installations and the recovery of a root password.
* Kickstart both Virtual Server and bare-metal from **CPAN**, obtaining the specs files convert them to rpm format for installation on both **RHEL** and **CentOS** Servers.
* Integrated ant with **Shell** scripts created in **Bash** to automate the deployments for the Java-based applications.

**Environment:** *RedHat Enterprise Linux, Bamboo, Subversion, Perforce, Nagios, ANT, Python, Puppet, CentOS, Ubuntu, Kickstart, VMware, TCP/IP, NIS, NFS, DNS, SNMP, VSFTP, and DHCP.*

**Linux Administrator**

**Mphasis, Hyderabad, India Nov 2012 – Nov 2015**

**Responsibilities:**

* Installed, Configurated and Managed **RedHat Enterprise Linux 5.x**, Windows Server **2003 Active Directory**.
* Involved in Installing, configuring and maintaining application Servers like **WebSphere** and Web servers like Web Logic, **Apache**, **HTTP** and **Tomcat** on UNIX and Linux.
* Worked on **NIC bonding** on Linux Enterprise servers for high availability, redundancy, and Increased bandwidth.
* Wrote UNIX shell scripts for automated installations, to extract logs using **Bash**, **Perl**, and **Python**.
* Managed users, groups and permissions, configured **LDAP** and given **SUDO** Access in test and development servers and allowed password less logins for authorized users on servers.
* Developed Linux, UNIX, **Perl** and **Shell Scripts** and AWT programming for manual deployment of the code to various environments.
* Installed and configured the necessary packages using the **RPM** & **YUM** software/package management.
* Installing Red Hat Linux using **kick-start** and applying security policies for hardening the server based on the company policies.
* Worked on creating, cloning Linux **virtual Machines**, templates using VMware Virtual Client 3.5 and migrating servers between **ESX** hosts.
* Assisted project management team with design issues, troubleshoot technical issues, rotating on-call pager, Install **OS patches**, **NFS** mounts, and **Automount**.
* Administered and supported application servers included troubleshooting and monitoring servers using **Nagios**.
* Setting up user and group login ID's, printing parameters, network configuration, password, resolving permissions and access related issues via **ACL**.
* Setting up network environments using **TCP/IP**, **NIS**, **NFS**, **DNS**, **SNMP**, **VSFTP,** and **DHCP**.
* Worked on setting up **LDAP**, **DNS**, **DHCP** Server along with effective group and System Level policies and roaming profile features by using **Samba** and **NFS** servers.
* Installed, configured, performance tuning, security, backup, recovery and upgrade/patches of Linux and UNIX servers using **Crontab**.

**Environment:** *RedHat Enterprise Linux 5.x, YUM, Bash, Firewall, Apache, Volume Groups, LVM, NFS, FTP, SAMBA, SSH, DHCP, DNS, VERITAS Cluster Server, Windows Server 2003 Active Directory, Kickstart server.*

**EDUCATION:**

Master of Science - Computer Science

**Kent State University**, Kent, OH.

Bachelor of Technology – Mechanical

**Jawaharlal Nehru Technological University**, Hyderabad, India.