**T.RAKESH**

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**Background Summary:**Over **8+ years** of experience in **Information Technology** industry in **DevOps/ Agile** operations, **Linux Administrator**, **Software Configuration Management**/ **Release Management** Specialist and **Cloud Management**

* Experience in Linux Administration (**Installation, Configuration, Tuning** and Upgrades of Linux (**Red Hat and Oracle**).
* Experienced in all phases of the software development life-cycle **(SDLC)** with specific focus on the build and release of quality software. Experienced in Waterfall, Agile/Scrum, Lean and most recently Continuous Integration **(CI)** and Continuous Deployment **(CD)** practices.
* Custom integration, plugins dev for different tools around **CI-CD** like **GIT, JENKINS**, **Artifacory**, Rally, Guard, Reporting and **Dashboards using API** and other techniques.
* Worked to help design, install and deploy cloud based Big Data solutions using Azure and AWS, including Redshift scaling and database creation for clients.
* Good experience in Cloud foundry and Azure.
* Highly skilled in automating Operating System installation and setup utilizing Jumpstart Servers for provisioning of Solaris 9/10 servers and Kickstart servers for provisioning of RHEL 4.x/5.x/6. x.
* In-depth understanding of the principles and best practices of **Software Configuration Management (SCM)** in Agile, SCRUM to Stash Migration, Waterfall methodologies.
* Expertise in implementing the **Configuration Management** Tools like **CHEF, PUPPET** and **Ansible**
* Developed applications on **Spring Boot Framework** using **MicroService(**SOA) Architecture and Synchronous protocols such as **Java /REST**
* Strong proficiency in supporting Production Cloud environments (**AWS, Azure, VMWare**) as well as traditional managed hosted environments.
* Experience with **Python** as primary backend and with many **MVC** frameworks like Django, Flask and Web2py etc.
* Design and Developed **Web Services, RESTful** API's for Mobile Apps using **Python Django**-REST and Flask Frameworks on Nginx and Uwsgi servers.
* Experience in working on cloud **AWS cloud** EC2, S3, EFS, RDS, LoadBalancer, Auto Scaling with **AWS** command line interface and **AWSPYTHON SDK.**
* Experience in working with Terraform key features such as Infrastructure as code, Execution plans, Resource Graphs, Change Automation
* Experience in Test Driven Development **(TDD).**
* Use of **Docker** to mange **micro services** for development and testing
* Worked on infrastructure with **Docker** containerization. Collaborated with development support teams to setup a continuous delivery environment with the use of **Docker.**
* Good experience on DevOps tools such as Vagrant, Oracle Virtual Box, **JENKINS, Maven, ANT**, IBM uDeploy, **CVS, SVN, GIT, Gerrit, SonarQube, Docker, Docker-compose, Micro Services**.
* Proficient in writing **PUPPET** modules and **CHEF** cookbooks
* Deploy architecture on **AWS cloud** for **Lamp Stack** application.
* Worked on both on-premises machines and cloud instances of **Azure** and Amazon Ec2 also done provisioning of those.
* Experience in working on cloud **AWS cloud** EC2, S3, RDS, Load Balancer, Auto Scaling with **AWS** command line interface and **AWS PYTHON SDK.**
* Experienced in migrate an On-premises VM or Azure Classic VM to Azure ARM Subscription with Azure Site Recovery.
* Hands on experience with AWS cloud-specific technologies, including Elastic Compute Cloud (EC2), Simple Storage Services (S3), Route 53, Cloud Formation, Elastic Beanstalk, Virtual Private Cloud(VPC), RDS, Cloud Watch and many more
* Ability in execution of **XML, Ant Scripts, Shell Scripts, Perl Scripts**, Shell scripts and JAVA Scripts.
* Development and version control of **CHEF Cookbooks**, testing of **Cookbooks** using Foodcritic and Test Kitchen and running recipes on nodes managed by on-premise **CHEF Server.**
* Resolving cookbook dependencies using Berkshelf.
* Running recipes in standalone mode using **CHEF**-solo and **CHEF**-zero.

**TECHNICAL SKILLS:**

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| **SCM Tools** | Subversion, GIT, CVS, AWS and Stash. |
| **CI & Provisioning Tools** | Hudson, JENKINS, Bamboo 5.11, Ansible, CHEF, PUPPET. |
| **Build Tools** | ANT, MAVEN, Gradle, Docker. |
| **Operating System** | Windows 98/XP/NT/2000/2003/2008, UNIX, IOS, Red Hat LINUX, Ubuntu, Fedora. |
| **Bug Tracker & Testing Tools** | JIRA, Bugzilla, Remedy, Junit, IBM Clear, Quest, Findbug Static |
| **Analytics** | SAS Studio, AWS EMR |
| **Tools** | MS Office Suite, Nexus, Atlassian Confluence. |
| **SDLC** | Agile, Scrum Waterfall Methodologies. |
| **Languages** | C, C++, SQL, .NET, PYTHON, Spring, Ruby, Objective C, Java/J2EE. |
| **Scripts** | Shell Script, CMake, Batch Script, Groovy, Perl Script, PowerShell Script. |
| **Web Technologies** | Servlets, JDBC, JSP, HTML, Java Script, XML, JSON. |
| **Web/App servers** | WebLogic, Web Sphere, Apache Tomcat, RHEL, JBOSS. |

**PROFESSIONAL EXPERIENCE**

**Client: T-Mobile, Atlanta, Georgia Feb 2016- Present**

**Role: Senior Cloud DevOps Engineer**

* Develop tools to automate the deployment, administration, and monitoring of a large-scale AWS Linux environment.
* Using Chef, deployed and configured Elasticsearch, Logstash and Kibana (ELK) for log analytics, full text search, application monitoring in integration with CloudWatch.
* Design and document CI/CD tools configuration management.
* With setting up Chef Infra, Bootstrapping nodes, creating and uploading Chef Recipes, Chef Node convergence in Chef SCM.
* Created a Continuous Delivery pipeline to bundle Chef Cookbooks and Cloud formation templates and push them to S3 buckets using Jenkins, Git.
* Installed Chef Server Enterprise on premise/workstation/bootstrapped the nodes using knife and automated by testing Chef recipes/cookbooks with test-kitchen/Chef spec.
* Also, used Chef for provisioning the infrastructure and also wrote Chefcookbooks and recipes to provision several pre-production environments.
* Worked on setting up the projects in GIT created POM.xml file and integrating with Jenkins for continuous integration
* Developed and designed continuous integration pipeline and integrated using bitbucket, Jenkins, SonarQube.
* Scheduled, deployed and managed container replicas onto a node cluster using Kubernetes
* Worked with various types of Code (Sql, Scala, java and .Net).
* Enabled Continuous Delivery through Deployment into several environments of Development, Test and Production using Maven and SonarQube.
* Deployed Spring Boot frame work using java (SOA) Architecture and Synchronous protocols like REST.
* Use shell scripts to automate functions inside of IBM Urbancode (UCD).
* Improved and managed Maven plugin (Maven-configfilter-plugin) for managing configuration through the modules.
* Used various services of AWS for this infrastructure. I used EC2 as virtual servers to host GIT, Jenkins and configuration management tool like Chef. Converted slow and manual procedures to dynamic API generated procedures.
* Used Kubernetes to deploy and manage containers (pods) on AWS.
* Created private cloud using Kubernetes that supports development, test and production environments.
* Created best practices Build environment using Jenkins, Packer, immutable instances and AWS.
* Strong proficiency in supporting Production Cloud environments (AWS, Azure, VMWare) as well as traditional managed hosted environments.
* Building and Installing servers through Azure Resource Manager Templates or Azure Portal.
* Managing Amazon instances by taking AMIs and performing administration and monitoring of Amazon instances likeEC2 using Amazon Cloud Watch, Transfer data from Datacenters to cloud using AWS Import/Export Snowball service.
* Involved in building own Paas with Docker deployed various applications through Dockerscontainers.
* Coordinated with team leads to determine needs and how best to implement JIRA within department.
* Dockerized applications by creating Docker images from Dockerfile
* Used Ansible Control server to deploy plays and playbooks to the machines and systems in the inventory with Chef.
* Experience in installing and configuring AEM CQ5, used it to structure log file and machine data.
* Worked on deployment automation of all the Microservices to pull image from the private docker registry and deploy to docker swarm cluster using Chef.
* Implemented continuous integration using Jenkins and configured various plugins GIT, Maven, SonarQube, and Nexus.
* Worked on Docker compose to schedule multiple containers and written compose.yml files to configure and scale multiple application services.
* Worked to setup Jenkins as a service inside the Docker swarm cluster to reduce the failover downtime to minutes and to automate the Docker containers deployment without using configuration management tool.
* Researched and implemented code coverage and unit test plug-ins with MAVEN/Jenkins.
* Used ANT and MAVEN as a build tools on java projects for the development of build artifacts on the source code
* Created a Perl script to generate tar files for the change-set related to a particular JIRA ticket, which was then uploaded automatically to the FTP server
* Hands on experience in installing and administrating CI tools like Jenkins, GIT, Perforce and Artifactory.
* Significantly decreased possibility of human mistakes and robust of installers by converting legacy WinBatch software installation scripts to PowerShell.
* Coordinate/assist developers with establishing and applying appropriate branching, labeling/naming conventions using Git.
* Implemented devops pipeline using various tools like Jenkins, GIT, SonarQube and Sonatype Nexus

**Environment:** CHEF, Openstack, Micro Services, JENKINS, Cloud Foundry, Cloud Watch, Cloud Formation , Docer, PYTHON, Ruby CHEF, JIRA, Confluence, Azure, Maven, Artifactory, GITHUB, Ubuntu, CentOS, Linux, AWS ELB, AWS EMR, AWS S3, AWS Cloud Formation Templates, Terraform, kubernetes RDS, AWS Cloud Watch, Ruby, RedShift, AWS EFS, Tomcat, Apache, ElasticSearch.

**Midwest Independent System Operator, Carmel, IN July 2015 – January 2016**

**Cloud AWS/DevOps Engineer**

**Responsibilities:**

* Experience as Cloud AWS DevOps Engineer project teams that involved different development teams and multiple simultaneous software releases.
* Build and release software baselines, code merges, branch and label creation in Subversion/GIT and interfaced between development and infrastructure.
* Working for DevOps Platform team responsible for specialization areas related to CHEF for Cloud Automation.
* Administration of RHEL 5,6,7 which includes installation, testing, tuning, upgrading and loading patches, troubleshooting on both Pseries and vmware virtualization systems
* Developed scripts using PERL, BASH and BATCH files for Automation of Activities and builds.
* Authored application using Spring Cloud services (spring version of Netflix OSS-Eureka, Circuit Breaker, and Ribbon).
* Deployed application using Pivotal Cloud Foundry (PCF) CLI.
* Wrote Python routines to log into the websites and fetch data for selected options.
* Developed Python/Django application for Google Analytics aggregation and reporting.
* Build and use CloudFormation\ Terraform templates to design and launch applications.
* Implemented monitoring solutions with Elasticsearch and Logstash.
* Use of Docker to mange micro services for development and testing.
* Managed local deployments in Kubernetes, creating local cluster and deploying application containers.
* Container management using Docker by writing Docker files and set up the automated build on Docker HUB and installed and configured Kubernetes
* Malware hunting through Kibana and Graylog.
* Created ELK Dashboards and Searches and Parsing logs in Graylog.
* Experience in supporting data analysis projects using EMR on the AWS Services AWS Cloud and exporting and importing data into S3.
* Generated Python Django forms to record data of online users and used PyTest for writing test cases.
* Utilized standard Python modules such as CSV and pickle for development.
* Developed Wrapper in Python for instantiating multi-threaded application.
* Written and developed CHEF Cookbooks from scratch for custom installation of application.
* Used CHEF for Continuous Delivery. Managed CI and CD process and delivered all application in rpms.
* Writing chef recipes for various applications and deploying them in AWS using Terraform.
* Responsible for CI and CD using JENKINS, Maven and CHEF.
* AWS EC2/VPC/S3/SQS/SNS based infrastructure automation through Ansible, Python, Bash Scripts.
* Actively involved in architecture of DevOps platform and cloud solutions.
* Integration of Automated Build with Deployment Pipeline. Currently installed CHEF Server and clients to pick up the Build from JENKINS repository and deploy in target environments (Integration, QA, and Production).
* Configuring of Redshift cluster for report query.
* Created proper documentation for new server setups and existing servers.
* Developed installer scripts using Maven, PYTHON for various products to be hosted on Application Servers
* Worked on installation of Docker using Docker toolbox.
* Worked on creation of custom Docker container images, tagging and pushing the images.
* Expert working knowledge of Chef, Terraform, Cloudformation.
* Worked on creating the Docker containers and Docker consoles for managing the application life cycle.
* Developed Pom.xml files for Maven build scripts.
* Experience in administering and maintaining Atlassian products like JIRA, bamboo, Confluence
* Maintaining a farm of EC2 instances, ELB's and RDS.
* Worked on Cloud automation using AWS Cloud Formation templates
* Configure, monitor and automate Amazon Web Services as well as involved in deploying the content cloud platform on Amazon Web Services using EC2, S3 and EBS.
* 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.
* Evaluating testing of CHEF Recipes - Concept of Test Driven Development for Infrastructure as a Code.
* Automate Continuous Build and Deploy Scripts for JENKINS Continuous Integration tool
* Automated the cloud deployments using CHEF, PYTHON (boto & fabric) and AWS Cloud Formation Templates.
* Implemented rapid-provisioning and life-cycle management for Ubuntu Linux using Amazon EC2, CHEF, and custom Ruby/Bash scripts
* Implemented CHEF Cookbooks for OS component configuration to keep AWS server's template minimal.
* Written CHEF Cookbooks for various DB configurations to modularize and optimize end product configuration.
* Maintenance of source code in GIT. Branching, Creating LABELS, merging of codes on GIT for QA testing and release.
* Troubleshooting and resolving issues in JIRA and Confluence as users.
* Provided documentation of customer JIRA terms, standard practices, and implementation and weekly status reports.
* Managed central repositories: Implemented Atlassian Stash along with GIT to host GIT central repositories for source code across products, facilitate code reviews and login audits for Security Compliance.
* Experience using AWS -Cloud Watch and created alerts for instance

**Environment:**CHEF, Openstack, Micro Services,JENKINS, Cloud Foundry, Cloud Watch, Cloud Formation , Docker, PYTHON, Ruby CHEF, JIRA, Confluence, Graylog, Maven, Artifactory, GITHUB, Ubuntu, CentOS, Linux, AWS ELB, AWS EMR, AWS S3, AWS Cloud Formation Templates, Terraform,kubernetes RDS, AWS Cloud Watch, Ruby, RedShift, AWS EFS, Tomcat, Apache, ElasticSearch.

**Global Tel Link, Alton, PA September 2014 – June 2015**

**Role: Cloud Automation Engineer**

* Developed and supported the Software Release Management and procedures.
* Installing, configuring and administering JENKINS CI tool on Linux machines.
* Build scripts on AWS cloud for scheduling EC2 auto scalling load balancer with PYTHON sdk.
* Worked on AWS cloud watch for monitoring the application infrastructure and used AWS email services for notifying.
* Deployed and troubleshoot of various JENKINS issues. Installed and uninstalled, upgraded and downgraded various plugins in JENKINS.
* Installation and configuration of management tool Puppet across RHEL environment.
* Developed python code for different tasks, dependencies, SLA watcher and time sensor for each job for workflow management and automation using Airflow tool.
* Developed views and templates with Python and Django's view controller and templating language to created user-friendly website interface.
* Developed Wrapper in Python for instantiating multi-threaded application.
* Created build slaves, configured and maintained build jobs for build automation and release process in JENKINS.
* Completed the migration of on premise data from DB2 to AWS Redshift
* Worked with GIT, GIThub and Maven projects configured in JENKINS.
* Involved in JENKINS backups and restores.
* Migrated applications from internal data center to AWS.
* Worked on Amazon cloud POC (AWS installation of open stack and Image).
* Involved in Setup and Configuration of PUPPET Configuration Management.
* Installed and configured an automated tool PUPPET that included the installation and configuration of the PUPPET master, agent nodes and an admin control workstation.
* Hosted monitoring and alerting web app for Elasticsearch clusters
* Developed search/analytics platform processing application logs/metrics a month using Java,  Elasticsearch, Kibana.
* Created and updated PUPPET manifests and modules, files, and packages stored in the GIT repository.
* Installed/Configured/Managed PUPPET Master/Agent. Wrote custom Modules and Manifests, downloaded pre-written modules.
* Experience working with PUPPET Enterprise and PUPPET Open Source.
* Managed AWS based application infrastructure, using Puppet and Terraform configuration Management/orchestration tools.
* Responsible for creating PUPPET modules and Manifest files from scratch and experience in editing existing PUPPET manifests and automated manual installation processes using PUPPET
* Analyze and resolve conflicts related to merging of source code for GIT.
* Developed scripts using Perl, BASH and BATCH files for Automation of Activities and builds.
* Implemented a Continuous Delivery framework using JENKINS, PUPPET, Maven& Nexus in Linux environment.
* Using ANT, PUPPET Scripts with Ivy to build the application and deploy.
* Configured Apache webserver with Websphere application server through proxy plug-in.
* Experience in designing and deploying best SCM processes and procedures.
* Involved in JIRA as defect tracking system and configure various workflows, customizations and plug-ins for JIRA bug/issue tracker.
* Collection of JVM statistics, garbage collection data for monitoring the heap and physical memory.
* Implemented multi-tier application provisioning in Openstack cloud, integrating it with CHEF/PUPPET. Adding vSphere to nova compute nodes and Manage and troubleshoot the Nova Compute and Controller Services.
* Experience in using weblogic, Admin, weblogic, Deployer and weblogic server commands.
* Developed scripts for WebLogic application server administration.

**Environment:**Amazon Web Services, PUPPET, SVN, GIT, GITHub, JENKINS,CHEF, Maven, ANT, Tomcat, Cloud computing, Docker, JIRA, Shell/Perl Scripts, PYTHON, Nagios, ElasticSearch, Terraform.

**Direct TV, El Segundo, CA January 2013 –August 2014**

**Role: Jr DevOps Engineer**

* Developed build using ANT and MAVEN as build tools and used CI tools to kick off the builds move from one environment to other environments.
* Participated in the release cycle of the product which involves environments like developments QA and production.
* Hands on compiling builds using pom.xml and build.xml.
* Worked on troubleshooting with SVN and Cron Jobs.
* Integrate with JENKINS for Continuous Integration, Delivery and Build Management.
* Setup JENKINS tool to integrate the JAVA project and maintained JENKINS with continuous integration and deployment.
* Developed Scripts for AWS Orchestration using EC2,EBS,S3,Cloud Formation,IAM.
* Develop/capture/document architectural best practices for building systems on AWS.
* Implemented monitoring solutions with Elastic search and Logstash.
* Used Ansible for configure tomcat servers and maintain.
* Experience in writing Ansible scripts.
* Worked on Tomcat Web server for hosting web apps.
* Integrated GIT into JENKINS to automate the code checkout process.
* Worked closely with developers to pinpoint and provide early warnings of common build failures.
* Used GIT as Version Control System for two applications. Managed development streams and Integration streams.
* Setup various JENKINS jobs for build and test automation and created Branches, Labels and performed Merges in GITto access the repositories and used in coordinating with CI tools.
* Integrated MAVEN with GIT to manage and deploy project related tags.
* Installed and configured GIT and communicating with the repositories in GITHUB.
* Created and maintained Subversion/GIT repositories, branches and tags.
* Fisheye used to extract the information from repository and Crucible used to code review.
* Worked with Docker for convenient environment setup for development and testing.
* Installed Ansible Registry for local upload and download of Docker images and even from Docker hub.
* Worked on creation of PUPPET manifest files to install tomcat instances and to manage configuration files for multiple applications.
* Worked with an agile development team to deliver an end to end continuous integration/continuous delivery product in an open source environment using PUPPET and JENKINS to get the job done.
* Completely responsible for automated infrastructure provisioning (Windows and Linux) using PUPPET Scripts.
* Responsible for automated installation of PUPPET Enterprise 2.7 and configuring PUPPET Master and PUPPET Agents (both Windows and Linux Env) in AWS VPC Env.
* Implemented multi-tier application provisioning in open stack cloud, integrating it with PUPPET, migrating the application using MAVEN as build tool.

**Environment:** PUPPET, SVN, GIT, GITHub, JENKINS, AWS, Azure,CHEF, Maven, ANT, Tomcat, Cloud computing, JIRA, Shell/Perl Scripts, PYTHON, Nagios.

**Camirine, India June 2009 – December 2012**

**Linux Administrator**

* Installed, Configured and Maintained RedHat Linux (RedHat Enterprise Linux 5.x, 6.x & 7.x) on SPARC, x86 and Blade Centres.
* Worked on Virtualizing RedHat servers using vSphere 4.1/5.0 and managed ESX servers using vCenter and also worked with ESX Cluster and vMotion.
* Responsible for design and maintenance of the Subversion/GIT Repositories, views, and the access control strategies.
* Developed scripts using PERL, BASH and BATCH files for Automation of Activities and builds.
* Created the ANT scripts and extension of existing ANT scripts for deployment of applications to HUDSON
* Experience in Working with Oracle ERP, Oracle Fusion Middleware applications (Build automation and deployment)
* Build and Release management - GIT, Maven, Jenkins administration, Nexus.
* Extensively involved in build and release management process for multiple applications using ANT, MAVEN, Jenkins
* Used ANT and MAVEN as a build tools on java projects for the development of build artifacts on the source code.
* Setting up Change Management process and standardizing the policies for various applications
* Worked in setting up the repos to various projects in SVN
* Involved in migration fromSVN to GIT repos and worked with Linux sys admins for the same
* Designed and implemented Subversion and GIT metadata including elements, labels, attributes, triggers and hyperlinks.
* Developed Linux, UNIX, Perl and Shell Scripts and AWT programming for the purpose of manual deployment of the code to various environments.
* Monitoring - Nagios,Custom checks, AppDynamics, Splunk
* Responsible for Deployment Automation - Puppet, MCollective, Hiera, Custom Puppet modules, Ruby
* Experience in using Enterprise Chef for setting up Chef Workstation, Chef Serverand nodes.
* Experience writing Chef Cookbooks and recipes to automate the deployment process and to integrating Chef Cookbooks into Jenkins jobs for a continuous delivery framework.
* Operations - Custom Shell scripts, Ruby scripts, VM and Environment management.
* Manage configuration of Web App and Deploy to AWS cloud server through Chef.
* Coordinating with Different Project teams on Build & release planning and efforts.
* Work with different team members for automation of Release components.
* Involved in working with various code coverage tools like JACOCO
* Setup variousnon-production environments for validating various applications
* Worked with of Lucene search and OpenGrok code review tool
* Creating the SQL, PL/SQL scripts (DML and DDL) in oracle database and revising them in SVN
* Created multipleRuby, Perl and UNIX shell scripts for various application level tasks

**Environment:**RedHat Enterprise Linux 5.x, 6.x & 7.x,GIT, Ant, Maven, Artifactory, Tomcat, WebSphere, Clearcase, ClearQuest, Java, SVN, Stash, VMware, Clear Quest Jenkins, JBOSS, Fisheye, Shell, Perl Scripting, Nexus, Crucible, JIRA, WebLogic, WebSphere, Jenkins , CAST, Chef, Puppet.

**Highest Education: Bachelors degree course: electronics and communication engineering.**

**Year of completion: 2008**