**Jakku P Email: pjakku3@gmail.com**



**Sr. DevOps Cloud Engineer Phone # +1 (321) 234-5586**

**Professional Summary:**

* Around 8 years of experience in IT industry and gained expertise as Linux Administrator, build engineer and Release Management, Automating Software Configuration Management (SCM), Applications through Continuous Integration (CI) and Continuous Deployment (CD) and Managing Cloud Services.
* Experienced in end-to-end project management & Cloud Computing **Microsoft Azure**, **Amazon AWS** and **GCP** Application Life Cycle Management and Application Security & Compliance.
* 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.
* Competence in designing AWS Cloud models for Infrastructure-as-a-Service (**IaaS**), Platform-as-a-Service (**PaaS**) and Software-as-a-Service (**SaaS**).
* Implemented on AWS platform and its dimensions of scalability including Cloud Front, **Cloud Watch**, Cloud Trail, Cloud Formation, OPS Work, Security Groups.
* Worked with AWS Cloud Formation templates, **terraform templates** along with Ansible to render templates.
* Experience in administrating of **SAAS, IAAS & PAAS** **Virtual Machines** and Web/Worker roles on **Microsoft Azure** Classic, **Azure Resource Manager** and troubleshooting issues on **Azure VMs**. Supported technologies, such as Active Directory Federation Services, **Azure Active Directory**, Azure Cloud migration/ deployments - Azure SQL and **PowerShell**.
* Expertise in Azure Scalability and **Azure Availability** - Build VMs availability sets using the **Azure portal** to provide resiliency for IaaS based solution and Virtual Machine Scale Sets (VMSS) using Azure Resource Manager (**ARM**) to manage network traffic.
* Hands on experience on Azure VPN-Point to Site, Virtual networks, Azure Custom security, Endpoint security and firewall. Hands on experience on Backup and restore Azure services.
* Built a Full-Service Catalog System which has a full workflow using **Elasticsearch, Logstash, Kibana, CloudWatch.**
* Exposure in writing **Groovy** scripts for automation of build and infrastructure automation.
* Managed GIT repositories for branching, merging and tagging and developing **Shell/Groovy** Scripts for automation purpose.
* Created Security groups and worked with Access Control Lists (ACLs), snapshots and Amazon Machine Images (AMIs) of the instances for backup and creating clone instances.
* Expertise on creating playbooks and handlers in **Ansible** and technologies dealing with Microservices.
* Ability in deployment, build scripts and automated solutions using Python, Perl and Shell scripts.
* Expertise in all areas of SCM processes, including version, build and issue management, build and release management.
* Experience with build tools **ANT** and **MAVEN** for writing build.xml and pom.xml respectively.
* Worked on testing and automation tools like Selenium, Junit Framework and **Cucumber**.
* Extensively worked on Jenkins and Bamboo for continuous integration and for End to End automation for all build and deployments.
* Expertise in Deploying and troubleshooting the J2EE Applications (WAR & EAR) in WebSphere Application Server.
* Experience in working with databases like **Oracle, MongoDB and MySQL.**
* Expert in deploying the code through web application servers like **WebSphere/Web Logic/ Apache Tomcat/JBOSS.**
* Installed and Deployed Red Hat **Enterprise Linux 6.x/7.x, CentOS and Windows**. installation of **packages** and **patches** for Red Hat Linux and Windows Servers.
* Knowledge with Ansible for an infrastructure orchestration and automation, installation of the packages using **playbooks**.
* Experience in orchestrating environment deployment from OS all the way through the application layers of a solution, using tools such as Docker, Jenkins.
* Ability to architect and implement transition to **Docker** and develop distributed cloud system using **Kubernetes**.
* Experience with Open Shift, Kubernetes architecture and design, troubleshooting issues with platform components Azure, and developing global or multi-regional deployment models and patterns for large-scale developments and deployments on Cloud Foundry, Open Shift and Kubernetes.
* Installed and configured **Kubernetes** for Orchestration of **Docker Images** and **Cluster** Container management on **AWS** using **Kubernetes** Operations (KOPS).
* Good knowledge and experience in using **Elasticsearch**, **Kibana**, **CloudWatch**, **Nagios**, **Splunk**, **Prometheus** and **Grafana** for logging and monitoring.
* Configured and setup **ELK** stack (**Elasticsearch, Logstash and Kibana**) to collect, search and analyze log files across the servers and monitored the servers using Cloud Watch and ELK for Network and Log Monitoring.
* Expertise in Configuring and troubleshooting various Networking, Hardware & Linux/ UNIX server's services issues and performing preventive maintenance.
* Proficiency in using Docker Hub, Docker Engine, Docker images, Docker Weave, Docker Compose, Docker Swarm, and Docker Registry and used containerization to make applications platform when moved into different environments.
* Experience working on several **Docker components** like Docker Engine, Hub, Machine, creating **Docker images**, Compose, **Docker Registry** and handling multiple images primarily for middleware installations and domain configurations.

**Technical Skills:**

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| --- | --- |
| SCM Tools | Subversion (SVN), GIT and Bitbucket |
| Build Tools | Ant, Maven, Gradle |
| CI Tools | Jenkins, Bamboo, Team city |
| Virtualization | Vagrant, Oracle Virtual Box and VMware ESX |
| Configuration Tools | Ansible, Puppet |
| Clustering Tools | Docker, Kubernetes, OpenShift |
| Monitoring Tools | Splunk, Nagios and Datadog |
| Bug tracking Tools | Jira, Remedy, ClearQuest |
| Cloud Platforms | AWS, Azure, OpenStack |
| AWS Services | EC2, ELB, VPC, RDS, IAM, CloudFormation, S3, CloudWatch, CloudTrail, SNS, SQS, SWF, EBS, EMR, ELK, Dynamo DB, Redshift |
| Database System | MySQL, MongoDB |
| Languages | Python, Shell Scripting, Groovy Scripting, Power Shell, Terraform. |
| Servers | Apache Tomcat, WebLogic, WebSphere, JBOSS |
| Platforms | UNIX, Linux, Centos 6.5,7, Red Hat, Windows NT/2003/2008, Microsoft windows Vista/XP/2000 |

**PERSONAL EXPERIENCE:**

**HPE September 2020 to Present**

**Irving, TX**

**Sr. Automation Engineer**

**Responsibilities:**

* Working as **AWS** team member of cloud engineers and my responsibilities includes.
* Set up and built AWS infrastructure with various services available by writing **Cloud Formation Templates (CFT)** in **Json** and **YAML**.
* Setup & Managing **Windows** and **Linux** servers on **Amazon** using **EC2, EBS, ELB, SSL, Security groups, RDS** and **IAM.**
* Setup databases on **RDS** or **EC2** instances as per the requirement.
* Creation of POCs and architecture for upcoming engagements.
* Created **NAT gateways** and instances to allow communication from the private instances to the internet through bastion hosts.
* Used security groups, network ACL’s, internet gateways and route tables to ensure a secure zone for organization in AWS public cloud.
* Created S3 buckets in the AWS environment to store files and Encrypted with using **AWS KMS**.
* Share object access through **S3 bucket** with presign from AWS CLI for limited time.
* Implemented domain name service (**DNS**) through **route53** to have highly available and scalable applications.
* Used **ZAP** Scanner for Web application security scan.
* Installed, Configured, and managed Monitoring tools Such as **Cloud Watch** for resource Monitoring/Network monitoring.
* Installing and configuring **Jenkins Master** and **Slave Nodes**, Built **CI/CD** pipeline and managing the infrastructure as code using **Cloud Formation Templates** for Windows and Linux workflows.
* Automated the Continues Integration and continues Deployments using **Jenkins** by writing **Scripted** and **Declarative** Jenkins file in **Groovy**.
* Integrated **Git** and **Jenkins** to automate the code-checkout and automating builds for every pull and push requests with using **Webhooks** configuration.
* Integrated **Dockers** with **Jenkins** using the **Dockers** plugin.
* Implemented a continuous Delivery pipeline with **Docker, Jenkins, GitHub,**and **AWS.**
* Support containerization through **Dockers** and maintain snapshots of **Jenkins**.
* Automating the Build Infrastructure for deploying services in **Dockerized** environment using **Jenkins**, ZAP scanner, Groovy, **Docker**.
* Worked on **Docker** engine and Docker Machine environments, to deploy the micro services-oriented environments for scalable applications, **AWS ECS** to host cluster and container scheduling, **Docker compose** to define multiple container applications.
* Worked on creating the **Docker** containers and **Docker** consoles for managing the application life cycle.

**Environment & Tools:** AWS services, Cloud formation Templates (CFT), Jenkins, Groovy, ZAP, Nginx, Jira, GitHub, Micro services, Windows, Linux, Docker.

**BNYM, DXC Technology September 2018 to August 2020**

**Richardson, TX**

**DevOps Automation Engineer**

**Responsibilities:**

* Responsible for developing the automated scripts, promote the scripts to various environments, functionally Test to specifications, coordinate with development team and architect per the plan.
* Used **Ansible** to configure and manage infrastructure, created Playbooks to automate the configuration setups, Established Ansible Best practices approaches to system deployment with tools with Vagrant and managing **Ansible Playbooks** as a unit of software deployment and independently version controlled.
* Used **Ansible Tower and AWX** to manage Web applications, Environments configuration Files, Users, Mount points and Packages.
* Expert in creating modular roles for **Ansible** modules which can be reusable to automate the deployment without errors.
* Wrote **Ansible** Playbooks with Python **SSH** as the Wrapper to Manage Configurations of **AWS Nodes** and Test **Playbooks**on **AWS instances** using **Python**.
* Implemented Infrastructure automation through **Ansible,** for Auto provisioning, Code deployments, software installation and configuration updates.
* Customize the **Chocolaty packages** with using **Power shell** script and **RPM packages** with **Bash Script**.
* Expert in working with **PowerShell**, **Shell scripting** and **YAML** for developing the customer requirements.
* Extensively worked on **Jenkins CI/CD** pipeline jobs for end-to-end automation to build, test and deliver artifacts and Troubleshoot the build issue during the Jenkins build process.
* Written **groovy scripts** to use multi branch pipeline projects in Jenkins to configure it as per client’s requirements.
* Implemented **Groovy scripts** to automate the Deployment for every Push Commit from the GIT repository.
* Used **Groovy Scripts** for CI/CD pipeline builds and actively involved in the entire pipeline setups and **Jenkins** configuration.
* Developed build and deployment scripts using apache **Maven** as build tool in Jenkins to move from one environment to other environments and automated builds using **Maven** and **Ant** for creation of build artifacts like war or ear files.
* Configured **Terraform** with **Jenkins** and schedule jobs using Poll **SCM**option.
* Developed, and implemented**Architectural solutions** involving multiple **Pivotal Cloud Foundry (PCF) foundations**on**VMware**virtual infrastructure (on-premises).
* Set up and maintained Logging and Monitoring subsystems using tools like, **Elasticsearch, Kibana**, Prometheus, **Grafana** and **Alert manager**.
* Established infrastructure and service monitoring using **Prometheus** and **Grafana**.
* Used **Python Boto3** Module in Lambda Service and effectively used Cron Jobs along with **CloudWatch** alarms and sent SNS Notifications.
* Developed **Python** applications using various libraries like matplotlib, NumPy, pandas, etc. in our project and configured **MongoDB** and used it as backend database for interaction between APIs.
* Developed Templates for **AWS IaaS** (Infrastructure as a code) using **Terraform** to build staging and production environments.
* Implemented **AWS** solutions like **EC2, S3, IAM**, **Elastic load balancer (ELB), EBS, Security groups, Auto scaling** using **Terraform** templates.
* Design **AWS Cloud Formation**templates to create custom sized **VPC**, **subnets**, **NAT** to ensure successful deployment of Web applications and database templates.
* Used **AWS Kinesis** for managed and scalable platform for streaming data from web services and used to collect log and event data from sources such as servers and desktops.
* Using Ansible, deployed and configured **Elasticsearch, Logstash** and **Kibana** (**ELK**) for log analytics, full text search, application monitoring in integration with **AWS Lambda** and **Cloud Watch**.
* Utilized Amazon **Route53**to manage **DNS**zones and assign public DNS names to **elastic load balancers IP's**.
* Virtualized the servers using **Docker** for the test and development environment's needs by creating **Docker images**.
* Working on Creating custom **Docker Images** using **Docker files**, uploading these docker images to private **Docker Hub** repository and handling multiple images primarily for middleware installations and domain configurations.
* Building/Maintaining **Docker container** clusters managed by **Kubernetes** Linux, Bash, GIT, Docker, on **AWS** using **EKS** and **ECS**. Utilized **Kubernetes** and **Docker** for the runtime environment of the **CI/CD** system to build, test deploys.
* Development automation using **Kubernetes** cluster with Ansible, writing Playbooks.
* Managed Code Repository by, maintaining code repository in **GIT**, Improve practices of branching and code merge to custom needs of development team.
* Worked on Software Development Life Cycle (SDLC) methodologies such as **Agile** and **SCRUM.**

**Environment & Tools:** Ansible,VMware, Putty, Mobax term, Linux Server RHEL-6,7, windows 2012R, Windows 2016, Power shell, GIT, Jenkins, Chocolatey Packages, RPM packages, Jenkins, Mesos, AWS, AWX, App Engine, Docker, Apache Tomcat.

**Newegg Inc. June 2017 to August 2018**

**City of Industry, CA**

**DevOps Engineer**

**Responsibilities:**

* Involved in creating the **Azure Services** with Virtual Machine. Involved in developing the **Azure** Solution and Services like IaaS and PaaS. Managed Azure Infrastructure Web Roles, Worker Roles, Storage, **Azure AD** Licenses, and Office365. Created Cache Memory on Windows Azure to improve the performance of data transfer between SQL Azure and WCF services.
* Worked on **Azure Site Recovery** (ASR) for both migrating on premises physical servers, VMware into Azure environment and as a disaster recovery option and worked with creation and maintenance of Azure resources using a combination of **PowerShell** and **Azure Resource Manager** (**ARM**) **templates**.
* Created a resource group, storage account, and **Azure Files** in cloud Shell using **PowerShell**. Created **PowerShell** scripts to automate the **Azure Cloud system** creation including end-to-end infrastructure, VMs, storage, firewall rules.
* Used **Azure Express Route** to set up a private connection to Microsoft cloud services such as a Microsoft Azure and Dynamic 365.Configured Azure Virtual Networks, subnets, DHCP address blocks, Azure network settings, DNS settings, security policies and routing. Azure API Management, Security, Cloud-to-Cloud Integration (Public, Private).
* Used **Terraform** as Infrastructure as a code (IaaC) tool to automate end to end infrastructure deployment in Azure.
* Expertise in migrating the existing v1 (Classic) Azure infrastructure into v2 (**ARM**), scripting and templating the whole end to end process as possible. Configuring the Azure Load Balancer to load balance incoming traffic to VM's.
* Used Jenkins for **CI** as to deploy the Spring Boot Microservices to **Azure Cloud** and **OpenStack** using build pack and for **CD pipeline** involving **Jenkins** & **GIT** to complete the automation from commit to deployment.
* Build, deploy and migrate infrastructure to Azure utilizing **ARM templates** and **Terraform**. Work with **Azure DevOps** to create all-inclusive **CI/CD** process.
* Created **CI/CD** pipeline in the **Jenkins** and ran the build by integrating with GitHub repository by using build and deploy scripts.
* Using the **Groovy** script Developed **CI/CD** pipeline to be built for every commit from the git, and scheduled Cron jobs for some builds on times.
* Setting up continuous integration and builds using Jenkins with **Maven** and Tomcat repository.
* Administered Tomcat repository to deploy the artifacts generated by **Maven** and to store the dependent jars, which are used during the build.
* Worked on the Integration of Jenkins with the **Nexus** repository to store the logs, reports and generated artifacts.
* Repository Management tools like **Artifactory** and **Nexus** were used to store and reuse the artifacts generated after the build process.
* Developed **Maven** build scripts for maintaining test automation builds & Java based library to read test data from XML & Properties files using Junit and loading it into **Selenium**.
* Implemented the setup for Master Slave Architecture to improve the Performance of Jenkins. Used Jenkins for Continuous Integration and deployment into **Tomcat application server**.
* Buildup of Forwarders and perform Software installation upgrades and upgrading **Splunk** as and when required using automation tools.
* Performed **Splunk Indexers** Heads up gradation, installation and configuration of Splunk Apps.
* Generated and enhanced **Splunk Dashboards**, Reports, and Alerts.
* Installed **Docker Registry** for local upload and download of **Docker images** and from **Docker Hub** and created **Docker files** to automate the process of capturing and using the images.
* Integrated Jenkins with Docker container using **Cloud Bees**, Docker pipeline plugin to drive all microservices builds out to the **Docker Registry** and then deployed to **Kubernetes**. Integrated Selenium automation regression test suite in **Jenkins** build pipeline.
* Evaluated **Kubernetes** for **Docker** container orchestration. Managed **Kubernetes** using **Helm charts**. 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**.
* Extensively Worked on **Docker** service rolling updates to implement zero downtime PROD deployments. Worked with Docker Trusted Registry as repository for our Docker images and worked with Docker container networks communications using **Docker Weave**.
* Deployed full **Angular, Java Spring boot Application** War files in **Kubernetes clusters** on a **Docker container** using Shell scripts.
* Coordinate with Team and Project Manager for the Build, Release and Operations of the Projects to maintain typical requirements.
* Maintained GIT Repositories, Handled Releases and Branching activities for **GIT**.

**Environment & Tools:** Java Spring boot Application, MongoDB, Express, Angular and NodeJS, Splunk & log stash, GIT, Jenkins, Terraform, CI/CD Pipeline, Maven, Nexus, Selenium, Ansible, Tomcat, Kubernetes, Cookbooks, Shell Script, Splunk, Docker and Docker Swarm.

**The Coca-Cola Jan 2016 to May 2017**

**Atlanta, GA**

**DevOps Engineer**

**Responsibilities:**

* Managed Code Repository by, maintaining code repository in **Bitbucket**, Improve practices of branching and code merge to custom needs of development team.
* Setting up continuous integration and formal builds using **Bamboo** with Art factory repository.
* Resolved update, merge and password authentication issues in **Bamboo** and JIRA.
* Performed integration of Code Quality Analysis techniques - Check style, Find bugs with **Bamboo**.
* Converted and automated builds using **ANT**. Scheduled automated nightly builds using Jenkins.
* Responsible for automated Scheduled Builds/Emergency Builds and Release using **ANT** scripts for Enterprise application (J2EE).
* Managed the Maven Repository using **Nexus** tool and used the same to share the snapshots and releases of internal projects.
* Worked on high-volume crash collecting and reporting system, built with **Python**.
* Developed unit and functional tests in **Python**.
* Performed security related tasks such as timely updates, patching, and configuration changes.  Implemented the **Docker** for wrapping up the final code and setting up development and testing environment using Docker Hub, Docker Swarm and Docker Container Network
* Automated the Applications container deployment in **Docker** using Python and monitoring of these containers using **Nagios**.
* Configured **Nagios** to monitor Linux servers with Ansible automation.
* Monitoring Applications and Servers through **Nagios**, Web Servers Administration on **NGINX**.
* Independently built application designed the API structures with Node.js running on **NGINX**.
* Experience in Cloud computing, Windows **Azure** environment, creating the New VMs, Azure subscriptions, storage accounts, managing SSL certificates for IIS websites, administering azure assets using **PowerShell**.
* Worked on **Azure** cloud services, Azure storage, Azure active directory, Azure service Bus. Create and manage Azure AD tenants and configure application integration with **Azure AD**.
* Integrate on-premises Windows AD tenants and Configure application integration with **Azure AD**.
* Migrating Existing Active Directory and Exchange users to **Microsoft** AD.
* Worked in dealing with Windows **Azure IaaS** - Virtual Networks, Virtual Machines, Cloud Services, Resource Groups, Express Route, VPN, Load Balancing, Application Gateways, Auto-Scaling, Traffic Manager.
* In **Docker**, performed duties such as Maintaining, managing and configuring the **containers**, virtualization of applications. Making sure packed with required dependencies.
* Involvement in developing APIs using **Kubernetes** to manage and specify the copies of the containers to run the actual servers in the cloud environment. Scheduled, deployed and managed container replicas onto a node cluster using **Kubernetes** and deployed **Docker** containers through **Kubernetes** to manage the microservices using its Nodes, Pods, Config Maps, Selectors, Services.
* Worked closely with developers to pinpoint and provide early warnings of common build failures.

**Environment & Tools:** GIT, Bamboo, JIRA, ANT, Bamboo, Nexus, Ansible, Docker, Nagios, Nginx, Azure, Azure AD, IaaS, Python, Putty, WebSphere and Perl Scripts.

**OS Systems, Hyderabad, Telangana March 2014 to Dec 2015**

**Build and Release Engineer**

**Responsibilities:**

* As a Build & Release Engineer responsible for continuous delivery, working with different teams to deliver high-quality applications to satisfy growing customer and business demands.
* Developed and supported the software Release Management and procedures.
* Coordinating different tasks with different teams for creating usage models for different projects.
* Maintained build related scripts developed in **ANT**, **Python** and **shell**. Modified build configuration files including **ANT** build.xml.
* Worked with development team to migrate **ANT** scripts to **Maven**.
* Automated the build and release management process including monitoring changes between releases.
* Installed packages using yum and Red Hat Package Manager (RPM) on various servers.
* Implemented Infrastructure automation through **Chef**, for Auto provisioning, Code deployments, software installation and configuration updates.
* Improved the development and version control of Chef Cookbooks, testing of cookbooks using Test kitchen and running recipes on nodes managed by **Chef server**.
* Developed and maintained integration and release processes.
* Created multiple Python scripts for various application level tasks.
* Experience with Build Management tools like **Maven** for writing build.xml to Pom.xml.
* Worked with Oracle Database Admin to keep all the specified tables as assigned by developments in sync for every release.
* Extensive experience on configuring **Amazon EC2, Amazon S3, RDS, Amazon Elastic Load Balancing IAM** and Security Groups in Public and Private Subnets in VPC and other services in the AWS.
* Configured an AWS Virtual Private Cloud (VPC) and Data Base **subnet group** for isolation of resources within **AWS RDS**.
* Included **Security Groups**, network **ACLs**, **Internet Gateways**, and **Elastic IP's**to ensure a safe area for organization in AWS public cloud.
* Configured an AWS Virtual Private Cloud (VPC) and Data Base **subnet group** for isolation of resources within **AWS RDS**.
* Responsible for design and maintenance of the Subversion (**SVN**) Repositories.
* Imported and managed multiple corporate applications into Tortoise **SVN**.

**Environment & Tools:** SVN, RedHat, Puppet, Python Scripts, AWS, Maven, Oracle DB, Chef Cookbooks, Agile and Scrum.

**GGK Technologies, Hyderabad, Telangana May 2013 to February 2014**

**Linux Administrator**

**Responsibilities:**

* Performed Linux administration tasks in test and production environments with installing, configuring and troubleshooting the client applications on the UNIX servers.
* Experienced in automating different tasks using Windows Power shell and managed patching for LINUX and Windows servers.
* Set up user and group login ID's, printing parameters, network configuration, password, resolving permissions issues, user and group quota.
* Participated in trouble shooting issues for user/group authentication and authorization issues and browser issues.
* Performed Linux backup/restore with tar including disk partition and formatting.
* Worked extensively in using VI editor to edit necessary files writing shell script.
* Worked in Administration, maintenance and support of Red Hat Enterprise Linux (RHEL) Servers
* Responsible for configuring and connection to SSH through SSH clients like Putty and Cyber duck.
* Remote system administration using SSH and FTP.
* Adding servers to the domain and monitoring them using Spectrum.
* Experienced in troubleshooting critical hardware and software issues and other day-to-day user troubling tickets.

**Environment & Tools:** Linux, Unix, Windows, Power shell, SSH clients, Putty and Spectrum.