 **Jay G**

**Professional Summary:**

* Over 7 years of IT experience in **AWS** **Cloud** computing and on devops life cycle such as on **Build** and **Release** **Management**, **Configuration** **Management**, **Continuous** **Integration, Continuous Deployment, Linux Administration**.
* In depth understanding of the principles and best practices of software configuration management (SCM) in **Agile**, **Scrum** and **Waterfall** methodologies.
* Experienced in working on Amazon Web Services like **IAM, VPC, EC2, RDS, S3, AWS CLI, Route 53,** **SNS,** AWS **SQS, Elastic Load Balancing, Auto Scaling, CloudWatch, CloudFormation and** AWS **Ops Works.**
* Hands on experience in writing **YAML/JSON** scripts to automate Infrastructure using **AWS** cloud formation as well as **Terraform**.
* Involved in planning, designing and configuring multi-region failover with **AWS Route53**.
* Provide high durability of the available data using data storage in the **AWS S3 bucket**, versioning S3, lifecycle policies.
* Experienced in administrating of **IAAS** & **PAAS** Virtual Machines and Web/Worker roles on Microsoft **Azure** Classic and Resource Manager and troubleshooting issues on **Azure** VMs
* Gained experience in dealing with Windows **Azure** IaaS - Virtual Networks, Virtual Machines, Cloud Services, Resource Groups, Express Route, Traffic Manager, VPN, Load Balancing, Application Gateways, Auto-Scaling
* Worked as an administrator on Microsoft **Azure** and part of DevOps Team for internal projects automation and build configuration management. Involved in configuring virtual machines, storage accounts, and resource groups
* Hands on experience in Develop automation and processes to enable teams to **deploy, manage, configure, scale, monitor** **applications** in Data Centers and in **AWS** Cloud and **AZURE**
* Experience in creating and **launching EC2** instances using **AMI's** of Linux, Ubuntu, RHEL, and Windows and wrote shell scripts to bootstrap instance.
* Launched **Kubernetes** to provide a platform for automating deployment, scaling and operations of application containers across clusters of hosts.
* Worked on **Kafka, Spark** and **Hadoop**.
* Experience with **Apache** **Kafka** for High throughput for both publish and subscribing with disk structures that provide constant performance even with many
* terabytes of stored messages.
* Ensured **data integrity** and **data security** on **AWS** technology by implementing AWS best practices.
* Provide highly durable and available data by creating and **managing policies for S3** data store, versioning, life cycle policies.
* Experienced in working on container-based technologies like **Docker, Kubernetes and Red Hat** OpenShift.
* Worked on orchestration tool **Kubernetes** to **automate** deployments, scaling, and management of applications which are running multiple **docker** **Containers**.
* Worked on several Build tools like **Ant, Maven and** automation (CI/CD) tools like **Jenkins** also involved in Repository Management tools like **ARTIFACTORY**.
* Good at Installation and Configuration of **Nexus** repository manager for sharing the artifacts within the company and efficient in using **Nexus** and **Artifact Repository** managers for **Maven** builds.
* Experienced in authoring pom.xml files, performing releases with the **Maven** release plug-in and managing Maven repositories.
* Expertise in using **AWS Code Deploy** for migrating application code across multiple environments.
* Experienced in setting up installation, configuration and security of **Jenkins, bamboo and team city** for integrated automation of build and deployments.
* Managed to create and **run applications** on a **serverless** infrastructure and implemented CI/CD using AWS **Lambda** application model.
* Experience in using configuration management tools like **Ansible and Chef** in managing system configurations supporting large Environments.
* Experienced in writing **Ansible** playbooks to automate the build and deployment process on servers using **SSH** connections and reduced overall processing time.
* Experienced in installing and working with **Docker** containerization techniques to run different software packages on the containers to improve Continuous Delivery framework.
* Experienced in troubleshooting, Configuring and deploying various enterprise applications in **WebLogic**, **WebSphere**, and **Tomcat**.
* Expert in using **ELK Stack, Elastisearch** for deep search and data analytics, **Logstash** for centralized logging, log enrichment and parsing and **Kibana** for powerful and beautiful data visualizations.
* Monitored system performance health and using Monitoring Tools within **AWS** infrastructure like **CloudWatch.**
* Hands on experience in monitoring **EC2** instances and several **AWS** services using **Nagios** as well as log monitoring tools like **Splunk**.
* Experience in issue management and bug tracking tool **JIRA** for different severity level and priorities
* Extensive knowledge in writing **Shell, Python, YAML/JSON** and bash **scripting** and throughout the entire **Devops** Life cycle.

SKILLS

 *-DevOps -Configuration Management -AWS-Cloud Administrator*

 *-Technical troubleshooting - Infrastructure Automation -Continuous Deployment*

TECHNICAL SKILLS

|  |  |
| --- | --- |
| **Infrastructure as a Service** | AWS |
| **Containerization Tools** | Docker, Kubernetes, Red Hat OpenShift |
| **Configuration Management Tools** | CHEF, Ansible |
| **Build Tools** | Maven, ANT |
| **AWS Cloud Services** | EC2, VPC, S3, Route53, SNS, IAM, Cloud Front, EBS, ELB, ECS, Cloud Watch, Auto Scaling, SQS, Elastic Beanstalk |
| **Monitoring Tools** | Nagios, Splunk, Kafka |
| **Scripts/ Languages** | Shell Scripting, Ruby, YAML, Python, Perl |
| **Databases** | Oracle, MongoDB, SQL Server, MS SQL, NOSQL |
| **SCM/Version Control Tools** | GIT, GitHub |
| **Continuous Integration Tools** | Jenkins |
| **SDLC** | Agile, Scrum |
| **Bug Tracking Tools** | JIRA, Remedy |
| **Operating System** | UNIX, Linux (Ubuntu, Debian, RHEL, Centos), Windows |

**Fidelity Investments, Raleigh, NC Oct 2017 – Current**

**Sr. Cloud/DevOps Engineer**

**Responsibilities:**

* Working as a **DevOps Engineer** for a team that mainly worked closely with many proprietary (**Facebook** **owned**) tools as well as Open source tools like **Jenkins**, **Gerrit**, **AWS**, **JIRA**, etc. which were used for development and deployment of internal tools and programs.
* Monitoring and maintaining 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.
* Experienced **Cloud** and **DevOps** engineer in Automating, Configuring and deploying instances on **AWS, AZURE** Cloud environments and Data centers.
* Used **Jenkins** pipelines to drive all micro services builds out to the **Docker** **registry** and then deployed to **Kubernetes**, Created Pods and managed using **Kubernetes**.
* Mentored developers in **Kubernetes** design and custom application implementation and created a mesh pod network between **Kubernetes** clusters.
* Working 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.
* Responsible for authoring and editing **Python** scripts for automation purpose which enabled the QA testers to perform testing with a more reliable and faster performance.
* Written, Planned and Created the Infrastructure as code using **Terraform** and used it to create infrastructure in **Azure** and maintained using **Ansible** and Implemented Terraform modules for deployment of applications across multiple cloud providers.
* Created **Ansible** **Playbooks** to provision **Apache Web servers**, **Tomcat servers**, **Nginx**, **Apache Spark** and other applications.
* Used **Ansible** **Tower** to streamline the applications delivery and services to AWS in a cost-effective, Simple and Secure manner.
* 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.**
* Worked on **Ansible Tower** to automate repetitive tasks, quickly deploy critical applications and proactively manage changes.
* Written **Ansible handlers** with multiple tasks to trigger multiple handlers and to decouple handlers from their names, making it easier to share handlers among **Playbooks** and **Roles.**
* Our work involves more towards hardware testing and performance through ‘**Dogfooding’** where we usually implement various **DevOps** principles.
* Responsible for migration of **Flash** testing codes from **Gerrit** **server** to internal **GIT** **server**.
* Coordinated with various **Source** **Control** **Administrator** teams to create many authorized repositories which can be accessible to all developers worldwide.
* Deployed **Azure** **IaaS** virtual machines and Cloud services (PaaS role instances) into secure VNets and subnets.
* Experienced on creating **Azure** VM, Cloud Services and Storages by using **Azure** Power-Shell Script
* Design an **ELK** system to monitor and search enterprise alerts. Installed, configured and managed the **ELK** **Stack** for **Log** **management** within EC2 / Elastic Load balancer for **Elastic** **Search**.
* Monitored performance of the applications and analyzed log information using **ELK (Elasticsearch, Logstash, Kibana).**
* Deploy **Spark** jobs to Databricks platform from Corporate GitHub repositories by using Python tools, Setup VPC peering for Databricks Spark clusters to receive streaming data from **Kafka** clusters and access Data stax clusters in different AWS Production account, created users in Databricks platform and assigned ACLs to users.
* Collected Website activity and Stream processing using **Kafka**
* Managed Amazon instances by taking **AMIs** and performing administration and monitoring of the Amazon instances like **EC2** using Amazon **CloudWatch** and **Nagios, Splunk.**
* Debugging **Chef Recipes** and their execution trying to pull logs into **Splunk** and monitor deployments
* Configured **ELK (Elastic, Logstash and Kibana)** stack and implemented indexing of sample text files for effective search.
* Designed, deployed and coordinated with different teams to enhance **ELK** platform and took ownership of innovative technologies.

*Environment* - Amazon Web Services (AWS) LDAP, GIT/Gerrit, Jenkins, Chef, Agile, Bash scripting, Dogfooding, Shell, Python Scripting, Kafka, PHP, Phabricator, Confluence, JIRA, CentOS, Artifactory, Maven, various other Facebook Internal Tools.

**CVS Health, Phoenix AZ** **Mar 2016 – Sept 2017**

**DevOps Engineer**

**Responsibilities:**

* **Cloud/DevOps** **Engineer** for a team that involved different development teams and multiple simultaneous software releases. Provided end-user training for all **Subversion (SVN)**/**GIT** users to effectively use the tool.
* Worked on project **Container Interface Application (CIA)** for all Cisco Product lines and configured Cisco boxes through Yang technologies and **REST APIs**. Used **Python** **Django** **Framework** for developing the web framework for the application.
* Extensively used **Kubernetes** to deploy, load balance, scale and manage Docker containers with multiple name-spaced versions.
* Created **Cloud** **Formation** **Templates** for different envs(DEV/stage/prod) to automate infrastructure (**ELB**, **Cloudwatch alarms, ASGs, SNS, RDS** etc) on click of a button.
* Designed **AWS** **Cloud Formation** templates to create custom sized **VPC, Subnets, NAT** to ensure successful deployment of Web applications and database templates.
* Used **Terraform** in **AWS** **Virtual Private Cloud (VPC)** to automatically setup and modify settings by interfacing with control layer.
* Provisioned the highly available **EC2** instances using **Terraform** and **Cloud Formation** and wrote new plugins to support new functionality in **Terraform**.
* Created and maintained **Amazon Virtual Private Cloud** (**VPC**) resources such as **Subnets**, **Network Access Control Lists** (**NACL**), and **Security** **Groups**.
* Converted existing **AWS** infrastructure to server-less architecture (**AWS** **Lambda**) and deployed it via **Terraform**. **Migrated data from Datacenters and on-premises to Cloud using AWS Import/Export Snowball service.**
* Helped in creating a next generation platform using CoreOS Linux with fleet / **Kubernetes** based on Docker containers running in a Microservices ecosystem on **VMWare** **ESXi**.
* Used **ELK** for monitoring the **application**-**level** **metrics** as well as **system**-**level** **metrics**.
* Implemented a centralized logging system using log stash configured as an **ELK** stack (**Elastic search, Log stash, and Kibana**) to monitor system logs, VPC Flow logs, Cloud Trail Events, changes in S3 etc.
* Served the **ELK** stack community with use cases and **Logstash** plugin and deployed applications using **Jenkins** server and Troubleshoot build & release job failures, resolve, work with developers on resolution.
* Responsible for build, design and maintain the platform automation infrastructure using **Chef**. Involved in setting up **Chef Workstation, Nodes, Cookbooks, and Recipes** using **Ruby Scripting**. Excellent knowledge on **Knife, Ohai, Databags, Berkshelf** in **Chef**.
* Implemented **Test Driven Development** (**TDD**) approach for writing **Chef** Cookbooks using **Test-Kitchen, Berkshelf, FoodCritic, ChefSpec**.
* Experience working with **Docker Hub, Internal Docker Registry and Docker Engine**.
* Created **Docker** images using a **Dockerfile**, worked on **Docker** container snapshots, removing images and managing **Docker** volumes and for branching purpose.
* Implemented a distributed messaging queue to integrate with Cassandra using Apache **Kafka** and ZooKeeper.
* Developed a stream filtering system using **Spark** streaming on top of Apache **Kafka**.
* Created and configured **Ansible** playbooks to automatically install packages from a repository, to change the configuration of remotely configured machines and to deploy new builds and configured with **Ansible** Tower so that other users can run them with just a push of a button.
* Built EAR and WAR files with custom configuration settings using Maven Tool Kit and further developed **Ansible** playbooks to pull the artifacts stored in **Nexus** to continuously deploy the archives on to Apache Tomcat Web Server and WebSphere Application Servers.
* Enhanced existing CI System **Jenkins** and official nightly builds and managed it solely. Installed multiple **Plugins** for smooth build and release pipelines.
* Responsible for the development and maintenance of processes and associated scripts/tools for automated build, testing and deployment of the products to various developments.
* Configured **JIRA** workflows according to the needs to the CM team and integrated the project management features of with the build and release process.

*Environment* - Amazon Web Services (AWS) (EC2, Cloud Front, CloudWatch, RDS, ELB, EBS, S3, Route53, SNS, SQS, KMS, Cloud Trail, IAM, Cloud Formation, Virtual Private Cloud (VPC), LDAP, Vagrant, Microsoft AZURE, Terraform, GIT/SVN, Jenkins, Chef, JIRA, Gerrit, Kafka, Agile, ELK RedHat Linux, Docker, Powershell, GCP, Bash, shell, Python, Django, Kubernetes, Tomcat, Google Container Engine, OSS Sonatype Nexus.

**Dish, Denver, CO Feb 2014 – Feb 2016**

**Build and Release Engineer**

**Responsibilities:**

* Expertise in various **Branching** methodologies, merging and tagging to facilitate defect/change management in conjunction within projects across the organization.
* Evaluated the performance of memory and CPU usage of **EC2** instances and setting up Security Groups and **VPC**.
* Launched **Amazon** **EC2** cloud instances using Amazon Web Services (Ubuntu/RHEL) and Configuring launched instances with respect to specific applications.
* Used **AWS** Config service to enable assess, audit, and evaluate the configurations of AWS resources.
* Managed **Kubernetes** charts using Helm. Created reproducible builds of the **Kubernetes** applications, managed **Kubernetes** manifest files and Managed releases of Helm packages.
* Used **AWS Command Line Interface** (CLI) tool to manage AWS services, automating through scripts.
* Managed the code release process, deploying new systems, writing scripts and implemented new solutions to improve workflow.
* Implemented migrations and orchestrated large-scale Infrastructure from **on-premises** to **AWS** Cloud using **Terraform** and **Cloud Formation** templates.
* Installed **Pivotal Cloud Foundry** on EC2 to manage the containers created by **PCF**.
* Used **Docker** containers for managing development environments through creation of **Linux** virtual containers.
* Worked on **Docker** Container snapshots, attaching to a running container, removing images, managing directory structures and managing containers. Composed the **Docker** file to build the Docker image and configured the Build step - **Docker** Build and publish in **Jenkins** to execute the Docker Build step.
* Implemented cluster services using **Docker** and **Kubernetes** to manage local deployments by building a self-hosted **Kubernetes** cluster using **Terraform** and **Ansible**.
* Expertise in Enterprise repository management tools like **Nexus**, **Artifactory** etc.
* Maintained local team repositories and Organization’s central repositories for maven.
* Built scripts using **Maven** in **Jenkins** and **Sonar** to move from one environment to other environments. Deployed Applications into **PROD** & **Pre**-**Prod** environments with various Application server technologies like **Weblogic**, **Jboss** & **Apache** **Tomcat**.
* Experience in **Jenkins/Maven** package building and have hands on experience in development using **Shell** and **Python** scripting to automate processes.
* Worked on **Ansible** **playbooks**, which were written in **YAML** and maintain different **Ansible** roles.
* Used **ANT** and **Python** scripts to automate the build and deployment process to deploying the web services. Used services deploy command for building the web services. Used maven for few modules.
* Responsible for Maintenance, Regular Periodic Backups, User Management and Plug-in Management for **Jenkins**.
* Automated the continuous integration and deployments using **Jenkins**. Built end to end CI/CD Pipelines in **Jenkins** to retrieve code, compile applications, perform tests and push build artifacts to **Nexus**. Automated webserver content deployments via shell scripts.
* **Troubleshooted** deployment, infrastructure and start up issues on various application server’s product line.
* Helped teams move **Cronjobs**/**Scheduler** to **Jenkins** & configure jobs and **maintained over 250+ jobs** in **Jenkins** for different Application teams.
* Utilized Configuration Management tool like **Chef** & created **Chef Cookbooks** using recipes to automate system operations.
* Responsible for managing Ubuntu, Linux and Windows virtual servers on AWS EC2 instance by creating **Chef** Nodes through open source Chef Server. Experience in configuring
* Worked on **Splunk** for user administration setup, maintaining account, monitor system performance, configured network and server monitoring.
* **Troubleshooted Splunk feed issues** and data ingestion for remote locations.
* Manage the configurations of all the servers using **Chef** configured Jenkins builds for continuous integration and delivery. Automated web server content deployments via shell scripts.

*Environment* - Amazon Web Services(AWS), Chef, Jenkins, Splunk, Ansible, Docker, Pivotal Cloud Foundry (PCF), Log4j, SVN, GIT, P4V, Weblogic, Jboss, Maven/ANT, PowerShell Scripting, uDeploy, Linux, VMWare Servers, Shell scripting, Bash, SonarQube, Linux/RHEL, Windows, Python, PHP, Nexus, Artifactory.

**Value Labs, Hyderabad, India** **Jan 2013 – Dec 2013**

**Sr. Linux Administrator**

**Responsibilities:**

* **Linux Administrator** in a large team responsible for maintaining Linux operating systems such as **RHEL, CentOS, Ubuntu and SUSE 10/11**.
* Updated and automated **Release reports for Change Management**.
* Created **SVN** configuration record for builds using derived objects generated during build audit process.
* Responsible for building and releasing packages for testing. Adding servers to domain and managing the groups and users in **Active Directory**.
* Building & configuring **Redhat** Linux systems over the network, implementing automated tasks through **Crontab**, resolving tickets according to the priority basis.
* Administered **Redhat** Linux servers for several functions including managing **Apache/Tomcat server**, Mail server, **MySQL** database and firewalls in both development and production.
* Expertise in **UNIX** shell scripting and python scripts used to automate day to day administrative tasks.
* Involved in writing **Python**, **Perl** and Shell scripts for compilation and deployment process.
* Worked in an **Agile** / **Scrum** development team to deliver an end to end continuous integration and continuous deployment in **SDLC**.
* In charge of reviewing existing manual Software Builds, developing scripts to automate repeated tasks that are more susceptible to errors and risks using **Shell** scripting.
* Responsible for configuring and maintaining **Squid** server in **Linux**. Deployed **Java** applications into **Apache Tomcat** Application Servers.
* Used Test driven approach for developing the application and Implemented the unit tests using **Python** Unit test framework.
* Provided **24/7 on call support** on **Linux** Production Servers. Responsible for maintaining security on RHEL.

*Environment* - Linux, Python, Ruby, RHEL, Nginx, Microsoft Windows, TCP/IP, Java, Oracle, Agile, WebLogic, MySQL, Subversion, Apache, JBoss, Shell Scripting, Bash Scripting, Python, Powershell, Active Directory

**Virtusa, India**  **Sept 2011 – Aug 2012**

**System Administrator**

**Responsibilities:**

* Worked as a **System Administrator** responsible for virtualization; used **VMware ESX server 3.5, 4.0 VMware** workstation virtualization suite.
* Expertise in scripting for automation, and monitoring using **Shell** and **Python**.
* Used **Python** to integrate third party application on windows.
* Converted **Linux** systems from local password authentication to **LDAP** and **NFS** homes significantly increasing administrative efficiency.
* Installed operating systems on multiple machines and applied patches on servers using **Kickstart**.
* Configured **Linux Kickstart** on multiple servers for network installation and Perform regular installation of patches using **RPM** and **YUM**.
* Created Virtual Machines’ templates using **VMWare ESXi**.
* Used RPMs to install, update, verify, query and erase packages from Linux Server.
* Used **Logical Volume Manage (LVM)** to create disk groups, volumes, volume groups, and used **RAID**'s tools for backup and recovery.
* Managed **TCP/IP** packets & **DHCP** servers resolved TCP/IP network access problems for the clients and worked with various TCP/IP implementations like **NFSv4, NIS, DNS and DHCP.**
* Orchestrated and performed upgrade of Linux servers from 32-bit **RHEL4** to 64-bit Centos
* Experience in Installation of **SSL** **Certificates**, keystore certificates for websphere application and web logic application servers **Firewall** **configuration** using **IP tables** and worked with **SELinux** configuration.