**Mohan Shrestha**

**Professional Summary:**

* 7.5+ years’ experience in DevOps, Build &Configuration Management(SCM), Release Engineering and Linux Administration maintaining Code, Deploying, migrating code from Development, Test, QA to Production environments working closely with developers/Mangers reporting build failures report generation/build automation.
* Focused in the areas of Continuous Integration, Continuous Delivery (**CI/CD**) and release management.
* Experience in using **Nexus** repository manager for versioning artifacts and deploying it to application servers.
* Configured **Jenkins** nodes to build jobs in the view of distributing the load of **Jenkins** server and achieved parallel builds.
* Expertise in automation tools like **Jenkins**, **Chef**, **Puppet**, **Ansible**, **Subversion**, **Ant**, **Maven**, and **Docker**.
* Configured **Jenkins** job with **Maven** build tool and accomplished continuous deployment by integrating **Ansible** and **Jenkins** using **Jenkins** plugins.
* Expertise in AWS Cloud IaaS stage with components **EC2**, **VPC**, **ELB**, **Auto**-**Scaling**, Security Groups, **Route53**, **IAM**, **EBS**, **AMI**, **RDS**, **S3**, **SNS**, **SQS**, **CloudWatch**, **CloudFormation**, **CloudFront**, Direct Connect.
* Expertise in Azure cloud environment using IaaS to spin up instances creating partitions and disk volumes
* Experience on installation of **Apache Tomcat**, **MySQL** and **Nginx**. Written playbooks to install and configure these packages.
* Specified Experience in configuring and deploying Java and J2EE applications into application servers (**Rational Web-sphere, Jboss and Apache Tomcat**).
* Experience on Automating the Build and Deploy of PHP, Python and Java applications to different environments by using **Ansible** and **Jenkins**.
* Experienced in installing, updating and keeping up **RedHat Enterprise Linux**, **SunSolaris**, **Ubuntu**, **Centos**, and **Windows** based situations.
* Creation of pipelines in Jenkins includes Continuous integration of tools like **Maven**, **Git**, **Sonarqube**, **nexus**, **Selenium** and Continuous deployment using **Chef** and **Vagrant**.
* Experience in fast paced Agile/ Scrum environment.
* Working with AWS Cloud computing and involved in creating AWS instances and deployed Linux and Ubuntu on AWS environment and Expertise in migrating applications onto AWS.
* Hands-on experience on minor & major upgrades physical to virtual environment (Openstack & VMware).
* Configured Ansible to manage **AWS** environments and automate the build process for core **AMIs** used by all application deployments including **Auto-Scaling** and **CloudFormation** scripts.
* Took Part in DevOps implementation pilot program and was trained in DevOps methodologies and tools like **Chef**, **Puppet** etc.,
* Written **Chef** Cookbooks and recipes to Provision several pre-production environments consisting of Apache domain creations and several proprietary middleware installations.
* Experience in the usage of data center automation and configuration management tools such as **Ansible**, **Vagrant**, **Docker**, etc.
* Good understanding of **OpenShift** platform in managing **Docker** containers and **Kubernetes** Clusters.
* Good understanding of Ansible, for configuring and managing computers, combining multi-node software deployment, ad hoc task execution, and configuration management.
* Experience with setting up Chef Infra, Bootstrapping nodes, creating and uploading recipes, node convergence in Chef SCM.
* Experienced with Windows, Linux/UNIX environments and scripting for Build & Release automation.

**Technical Skills:**

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| **Cloud Platform:** | AWS, Microsoft Azure, and Open stack. |
| **Configuration Management:** | Chef, Puppet, Vagrant, Maven, Ansible, Docker, Gradle, OPS Work. |
| **Database:** | Oracle, DB2, MySQL, MongoDB 7 SQL Server, MS Sql. |
| **Build Tools:** | ANT, MAVEN, Make file, Hudson, Jenkins, BAMBOO, Code Deploy. |
| **Version Control Tools:** | Subversion (SVN), Clear case, GIT, GIT Hub, Perforce, Code Commit. |
| **Servers:** | Apache, Tomcat, Web Sphere, Nix, JBOSS, WebSphere. |
| **Languages/Scripts:** | C, HTML, Shell, Bash, PHP, Python, PHP, Ruby and Perl. |
| **Web Technologies:** | HTML, CSS, Java Script, JQuery, Bootstrap, XML, JSON, XSD, XSL, XPATH. |
| **Operating Systems:** | Red hat, Ubuntu, Linux and WINDOWS. |

**Work Experience:**

**DevOps AWS Engineer**

**Cummins, Columbus, IN Jan 2017- Current**

**Responsibilities:**

* Experience in Software Integration, Configuration, building, automating, managing and releasing code from one environment to another environment and deploying to servers
* Involved in supporting cloud instances running Linux and Windows on AWS, experience with Elastic IP, Security Groups and Virtual Private Cloud in AWS.
* Extensive experience on configuring Amazon EC2, Amazon S3, Amazon Elastic Load Balancing IAM and Security Groups in Public and Private Subnets in VPC and other services in the AWS.
* Managed network security using Load balancer, Auto-scaling, Security groups and NACL.
* Experience in Python programming for deployment of Java applications and implementation and automation of Shell scripts for release and build automation
* Experience in migrating build.xml into pom.xml to build the applications using Apache MAVEN
* Engineered Splunk to build, configure and maintain heterogeneous environments and maintained log analysis generated by various systems including security products.
* 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.
* Implemented Jenkins Code Deploy plugin to deploy to AWS and used to automate the build process and deploy the application to Tomcat server.
* Created Route tables to route the traffic to find whether it is public or private network.
* Used Bootstrap Script for launching large number of instances in AWS
* Utilized AWS CLI to automate backups of ephemeral data-stores to S3 buckets, EBS and create nightly AMIs for mission critical production servers as backups.
* Used Chef for configuration management of hosted Instances within AWS, Configuring and Networking of Virtual Private Cloud (VPC).
* Used Cloud Front to deliver content from AWS edge locations to users, allowing for further reduction of load on front- end servers.
* Responsible for build and deployment automation using AWS, Docker, Kubernetes containers and Chef
* Focused on containerization and immutable infrastructure. Docker has been core to this experience, along with Kubernetes. Experienced in using Docker Swarm and deployed spring boot applications.
* Developed container support for cloud environments and Docker. Deployed the applications in Docker containers and managed the containers in enterprise level.
* Created Docker images using a Docker file, worked on Docker container snapshots, removing images and managing Docker volumes
* Configured Docker container for branching purposes and Implemented Docker automation solution for Continuous Integration / Continuous Delivery model
* Created and implemented chef cookbooks for deployment and used Chef Recipes to create a Deployment directly into Amazon EC2 instances
* Developed Chef Cookbooks to manage system configuration and for Tomcat, MySQL, Windows applications and versioned them on GIT repositories and Chef Server
* Installed RedHat Linux using kick start and applying security polices for hardening the server based on company's policies.
* Created users, roles and groups using Identity Access Management (IAM) and attached the required policies.
* Scripting of administration tasks using CLI, Power Shell, Shell and Ruby. Built upstream and downstream jobs in Jenkins to build and deploy onto different environments.
* Performed Branching, Tagging, Release Activities on Version Control Tool GIT (GitHub).

**DevOps Engineer**

**Wells Fargo, Des Moines, IA October 2015- November 2016  
Responsibilities:**

* Configured Jenkins with maven build tool in generating war/ear files and archived them.
* Responsible for maintaining backup and versioning of war/ear file using nexus repository.
* Integrated Git, Jenkins and maven in accomplishing continuous integration and configured Jenkins with Poll SCM build trigger.
* We are using Ansible as primary automation tool in configuring and deploying artifacts to several environments.
* As most of the infrastructure is hosted in AWS cloud I am responsible for creating and managing EC2 Instances.
* Configuring EC2 instances with Playbooks to enable environment for deployment.
* Maintaining AMIs of the Configured Ec2 instances.
* Creating Jenkins jobs and distributing load on Jenkins server by configuring Jenkins nodes which will enable parallel builds.
* Managing Jenkins artifacts in Nexus repository and versioning the artifacts with time stamp.
* Deploying artifacts into servers in AWS cloud with ansible and Jenkins
* Maintaining backup of Jenkins builds in AWS s3.
* Creating backup of EBS volumes and restoring it.
* Ensuring the servers to sustain the load by configuring Elastic load balancer & Auto scaling.
* Enabling robust virtual private cloud to ensure the network isolation from public cloud and securing them with Security groups and NACL.
* Involved in Writing Dockerfiles to build customized images for creating containers.
* Bundled automation content with Ansible roles to make the content reusable and made possible advanced execution in automation.
* Deployed builds to different environments like DEV, QA, UAT environments by integrating Jenkins and Ansible.

**DevOps Engineer**

**Safeway, Phoenix, AZ December 2012- August 2015  
Responsibilities:**

* Configuring Jenkins jobs with Git and Maven for generating artifacts
* Responsible for maintaining backups in Jenkins.
* Installing and configuring Ansible and involved in writing playbooks for configuring the servers.
* Configure Jenkins with ansible for deployment of the application in servers.
* Developing ansible roles for re-usability and scalability.
* Maintaining the versions of Jenkins artifacts in Nexus repository
* Maintaining backups of Jenkins artifacts in Nexus repository
* Managing Jenkins load by creating Jenkins slaves and ensuring parallel builds.
* Configured servers and deployed in different environments like DEV, QA, and UAT/STAGING.
* We use git to place our source code and involved in branching
* Configured Jenkins with GithubWebhooks to automate the integration and notifying the errors in source code to the developers.

**Linux System Administrator**

**Bent Ray Technologies, Kathmandu, Nepal September 2010 - November 2012**

**Responsibilities:**

* Installed and configured Ubuntu, Centos on remote servers and Desktop servers.
* Installation of patches and packages using RPM and YUM in Red hat Linux.
* Installed and configured Apache/Tomcat web server.
* Created and modified users and groups with SUDO permission.
* Worked with developers to load software onto Linux Enterprise servers and also debugging Scripts.
* Setup and administered user and groups accounts, setting permissions for users.
* Diagnosed and resolved problems associated with DNS, DHCP, VPN, NFS, and Apache.
* Creation and administration of Virtual Machines using VMware and virtual box.
* OS upgrades and installation of third party software, packages and patches as per requirement.
* Maintained the Linux Firewall for network and implement to the network security.
* Troubleshoot the network with the help of net stat, ping, and nslookup and trace route tools.
* Resolved TCP/IP network access problems for the clients. Develop, Maintain, update various scripts for services (start, stop, restart, recycle, Cron jobs) UNIX based shell.
* Experience installing and configuring SSH (Secure Shell) encryption in order to access securely on Ubuntu and Red hat Linux.
* Responsible for configuring and connection to SSH through SSH clients like Putty and Cyber duck.
* Regularly managed backup process for server and client data.
* Installed open source application, searched, analyzed and developed new application for users.