**Niraj Baruwal**

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**AWS DevOps/Cloud Engineer**

**Professional Summary:**

* 7+ Years of Proficient Experience in Technologies Like Ubuntu / RedHat / CentOS Servers,Amazon AWS, Azure DevOps, Shell Scripting, worked as Cloud/DevOps Engineer, Linux Administrator and Middleware Engineer providing solutionsto the complex issues utilizing most of the resources such as Virtualization, Integration and configuration Management tools, Configuring, Monitoring. Adopting DevOps Culture to automate the entire Software Development Life cycle and Implemented Continuous Integration, Delivery/Deployment pipelines.
* Being a part of AWS DevOps Engineer used all the AWS associated compute services like EC2, Auto Scaling, Kubernetes, VMware and storage services like S3, EBS, AWS Storage, Elastic File Systems and DataBase services like DynamoDB(No SQL),RDS(MySQL, Oracle, SQL Servers) and Content Delivering tools like VPC, Route 53, Load Balancing, Cloud Front.
* Expertise in creating complex and custom IAM policies, Roles, and user management for delegated users within AWS and experience in developing AWS cloud formation templates to create custom sized VPC, Subnets, EC2 instances, ELB and security groups.
* Extensive knowledge in migrating applications from internal data center to AWS.
* Experienced with both framework and cloud formation to automate AWS environment creation.
* Experience in working with Linux including Red Hat, CentOS, Ubuntu, Debian, configuration and administration of Red Hat Virtual machines in VMware Environment.
* Expertise in implementing the Configuration Management Tools like Chef, Puppet and Ansible.
* Created various plays / playbooks for automating various repetitive tasks, quickly deploy critical applications, Environment configuration Files with the help of various Ansible modules. Written Ansible Playbooks using YAML for Maintaining Roles, Inventory Files and Groups Variables.
* Experience in Azure DevOps, created both build and release pipelines
* Deployed servers using Puppet, and Puppet DB for configuration management to existing infrastructure and Implemented Puppet 3.8 manifests and Modules to deploy the builds for Dev, QA and production.
* Experience in Installing Chef Server Enterprise On-premise/workstation/bootstrapped the nodes using knife and developed Chef Cookbooks, Recipes, Roles and Data Bags to automate the services related to deployment.
* Utilized Kubernetes as a platform to provide a platform for automating the deployments, scaling and operation of application containers across a cluster of hosts. Worked closely with development teams and test engineers for EC2 size optimization and Docker build Containers. Used Kubernetes during debugging. Leading up to production when multiple application build must be tested for stability.
* Setting up CI/CD pipeline using continuous integration tools Jenkins and automated the entire AWS EC2, VPC, S3, SNS, RedShift, EMR based infrastructure using Terraform, Chef, Python, Shell, Bash scripts and Managing security groups on AWS and custom monitoring using CloudWatch.
* Worked with Terraform to create stacks in AWS updated the Terraform scripts based on the requirement on regular basis.
* Expertise on Source code control tools like SVN, Bit bucket (Git) and good knowledge on Branching and merging code lines in the GIT.Also used web hooks for integrating with continuous Integration tools Jenkins, Bamboo and ANT, MAVEN for generating builds. Designed quality profiles and certain standards set by installing Quality Gates in SONARQUBE.
* Expertise's in using build tools like MAVEN for the building of deployable artifacts such as war & ear from source code.
* As a build and release engineer used Microservice to build a large application.
* Understanding with the standards and great practices in Software Configuration Management (SCM) in Agile-SCRUM and Waterfall methodologies and Implemented Change Management Process for tracking different clients and setup tracking using JIRA/ ServiceNow.

**Technical Skills:**

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| **Operating Systems** | RHEL/CentOS 5.x/6.x/7, Linux-Ubuntu, Windows 7/8/XP/10, AWS-Linux CLI |
| **Networking** | VPC, Route-53, LDAP, DNS, SSH |
| **Databases** | MySQL, Cassandra, PostgreSQL, SQL Server |
| **Backup/Monitoring Tools** | S3 (Simple Storage Service), Cloud watch, Splunk, Nagios |
| **Source Control** | GIT, SVN |
| **Configuration Management** | Ansible, Puppet, Chef |
| **Virtualization/ Containerization Technologies** | AWS ECS, Docker Container services, Pivotal Cloud Foundry |
| **Cluster Management** | Kubernetes, Docker |
| **Languages** | Shell scripting, Bash |
| **Build and Deploy Tools** | ANT, Maven, Jenkins, Bamboo, TeamCity, TFS, MS Build |
| **Infrastructure** | AWS, Azure |
| **Software Methodologies** | Agile-SCRUM, Waterfall |
| **Project Management/ Bug tracking Tools** | JIRA, Confluence |

**Professional Experience:**

**Client: American Airlines, Fortworth, Texas**

**Duration : Mar 2020 -Current**

**Titles: AWS Cloud DevOps Engineer**

Responsibilities:

* Deployed and monitored scalable infrastructure on Amazon web services (AWS)& configuration management using puppet and Ansible.
* Provisioned tasks-based roles on Ansible playbooks for parallel deployment on multiple servers and provisioning of infrastructure with custom build plugins and modules
* Worked with projects using OpenShift client for Jenkins builds for various configurations.
* Provisioned AWS resources like EC2, VPC, EBS, AMI, S3 buckets, creation of subnets, and all other operational tasks using Ansible.
* Provisioned entire on premise infrastructure on AWS cloud using CloudFormation scripts for high availability and fault tolerance.
* Setup a Continuous Delivery pipeline using Ansible playbooks, which consists of sonar Server and Jenkins, the Infrastructure to run these packages, and various software components like Maven.
* Developed and supported the RHEL based infrastructure in the cloud environment.
* Migrated on premise Oracle database to AWS RDS using S3 and AWS VPC Peering.
* Supported AWS cloud instance, including management and configuration of various AWS services.
* Worked on creating EC2 instances, updating security group and IAM policies.
* Configured the entire existing stack in service-oriented architecture using Red Hat OpenShift’ s Kubernetes platform.
* Experience in working Terraform, Hashicorp.
* Worked with Ansible and CloudFormation scripts to build the base infrastructure with all necessary AWS services like VPC and EC2 for master/infra and app nodes.
* Performed Shell and Perl scripting for automotive tasks in Linux and wrote scripts on Python.
* Created S3 bucket ad updated the bucket policies, versioning and lifecycle. Setup static web content on S3 bucket.
* Used Jenkins to test the workflow of retrieving and running puppet modules from GitHub onto different test slaves.

**Client: Global Atlantic Financial Group, New York, NY**

**Duration : Jan 2017- Dec 2019**

**Titles: AWS Cloud DevOps Engineer**

**Responsibilities:**

* Supported AWS cloud instance such as management & configuration of various AWS products.
* Performed all the Linux operating system management, patch management, configuration management on the Linux instances in AWS
* Worked on AWS cloud computing platforms and its versatile scalability such as VPC, EC2, ELB, IAM, S3, auto scaling, code deploy, RDS, Lambda, custom monitoring with cloud watch.
* Worked on AWS in creation of Autoscaling Group and lunch configuration
* Configured an AWS Virtual Private Cloud (VPC) and Database Subnet Group for isolation of resources within the Amazon RDS Aurora DB cluster.
* Orchestrated and migrated CI/CD processes using Cloud Formation, terraform templates, and Containerized the infrastructure using Docker setup in AWS and Amazon VPCs.
* Wrote the Terraform scripts to install the Kubernetes cluster and its dashboard on to the AWS.
* Managed all existing servers and automated the build/configurations of new servers by integrating Ansible to manage and integrated Ansible with Jenkins, GitHub, and Maven.
* Wrote scripts on Python, shell and bash and modified existing scripts on automations.
* Wrote deploy hooks/scripts for code deploy to deploy code from Git using Jenkins to AWS EC2 instances and also have written multiple Jenkins jobs in bash
* Created and hardened an Amazon Machine Image (AMI) and installed google authenticator.
* Designed, configured and deployed Amazon Web Services for a multitude of applications utilizing the Amazon Web Services focusing on high-availability, fault tolerance and auto-scaling.
* Wrote Docker files and created images out of it as well as pulling and pushing Docker images to various environments from Docker Hub Registry.
* Deployed Dockerized Applications in Kubernetes cluster using Helm Charts.
* Worked on setting-up continuous deployment pipelines using Jenkins across multiple Kubernetes clusters to stress the clusters with new infrastructure tools for Kubernetes in development environments. Automated these pipelines through Jenkins using pipeline script.
* Installed Jenkins on AWS EC2 instance and configured to run all the application cron jobs to run through Jenkins server.
* Worked with GIT to store the code and integrated it into Ansible Tower to deploy the playbooks.
* Worked on the concept of GIT cloning to create GIT repository.
* Developed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT, EC2 instances, ELB, Security Groups.
* Used Ansible for central management of Linux configuration files and software package management.
* Managed Amazon Web Services (AWS) infrastructure with automation and configuration management tools Ansible.
* Configured Jenkins pipeline jobs workflows to improve reusability for building pipelines.
* Configured and managed Apache Web Server on Linux for web-based applications using REST/SOAP, Apache and WebLogic.

**Client: ConocoPhillips, Houston Texas**

**Duration : Sep 2015 – Nov 2016**

**Titles: AWS DevOps Engineer**

* Migration to Amazon Web Services & cloud technologies from their current datacenter and virtual environments.
* Designed and implemented AWS cloud-based instances for use on their current and upcoming projects.
* Worked with Amazon Web Services (AWS), EC2 Storage Managements integration and utilization within the infrastructure and applications.
* Infrastructure deployment, administration, troubleshooting and configuration of virtual and cloud instances on AWS and VMware platforms.
* Implemented AWS solutions using S3, RDS, EBS, Elastic Load Balancer, and Auto scaling groups.
* Responsible for Design of different Release Environments for new projects and monitoring.
* Implementing a Continuous Delivery framework using Jenkins, Chef, and Maven & Nexus in Linux environment.
* Creating, Utilizing, Managing Policies in S3 buckets on AWS. .
* Working on transferring SQLite data generated to S3 bucket using Python scripts.
* Working on Data Lakes in AWS using the SQLite data transferred to the S3 bucket.
* Using Cloud Formation tools like AWS Glue worked on Big Data related Data Lakes on Amazon Web Services.
* Created IAM roles to work on Data Lakes and added database to run it on demand.
* Wrote templates to build the infrastructure for the Vue.js application. NPM (Node Package Manager) dependencies were installed and used to run the application.
* Created a resource group which includes storage accounts, containers, functions, and SQL databases.
* Created CI/CD Pipelines in AZURE DevOps environments by providing their dependencies and tasks.
* Created azure key-vault to store all the credentials for SQL databases and API keys.
* Worked with automation tools which are pre-installed in the azure DevOps portal to build the packages. The automation tools like NPM and MAVEN with build.xml and pom.xml scripting languages depending on the packages like HTML ,CSS or java script.
* Automated configuration management and deployments using Ansible playbooks and Yaml for resource declaration. And creating roles and updating Playbooks to provision servers by using Ansible.
* Worked on monitoring servers using Nagios, Splunk using logging tools like ELK.
* Coordinate/assist developers with establishing and applying appropriate branching, labeling/naming conventions.
* Created Resource groups, App Services and Storage accounts manually on the Azure portal and later converted them to code, for the automation and easy migration keeping the future in mind.
* Created different stages, Published the Artifacts, Copied the files and Archived the files.
* Similarly, when the Master branch of GitHub is updated, it directly triggers staging, where you can verify all the developments before it moves to production.
* Created different pipelines, one for the cloud deployment, other for the backend data& one for Data flow.
* Wrote ARM templatesand PowerShell Scripts, to automate the pipelines as a code.
* Performed Integrated delivery using Jenkins. Done Branching, Tagging, Release Activities on Version Control Tools GitHub.
* Worked in an Agile methodology model, using Jira as the project management tool.
* Wrote the Bash Scripts for cloning the GitHub and setting up the project to work on the visual studio 2019.
* Worked onVisual studio 2019,and built the project using MS Build for the continuous integration.
* Worked on the Code Quality using SonarQube.Installed SonarQube plugin in Jenkins and integrated with project.Integrating SonarQube in the CI pipeline for code coverage reports.
* Used Jenkins and pipelines to drive all micro services builds out to the Docker registry and then deployed to Kubernetes

**Client: Beachbody, Santa Monica, CA**

**Duration : May 2013-Jul 2015**

**Titles: Linux System Administrator**

Responsibilities:

* Performed installation, configuration and maintenance of Red hat Linux.
* Handling HP and DELL servers running on Red hat Linux and SUSE Linux 9.
* Linux kernel, memory upgrades and swaps area. Red hat Linux Kickstart Installation. Configuring DNS, DHCP, NIS, NFS in Red hat Linux other Network Services.
* Performed daily backups, restoration of data as per requests using Veritas NetBackup.
* Worked on Servers consolidation and virtualization using HPSA VSphere virtual infrastructure, HPSA VSphere ESX and performed Network Monitoring Using Nagios tool.
* Network trouble shooting using ‘ndd’, 'traceroute', 'netstat', 'ifconfig' and 'snoop' etc
* Monitored system performance, user management, system updates and disk & storage management.
* Created users, manage user permissions, maintain User & File System quota on Red hat Linux
* Administered, maintained Red Hat, operating system, applications & network problems, and performance issues.
* Worked as part of a team to keep Linux OS systems maintained and optimized through daily patching, upgrading, and tuning when system maintenance was required.
* Configuration of NIS, DNS, NFS, SAMBA, SENDMAIL, LDAP, TCP/IP, Send Mail, FTP, Remote access Apache Services on Linux & Unix Environment.
* Responsible for configuring and connection to SSH through SSH clients like Putty Remotely copying files using SFTP, FTP, SCP, WinSCP, and FileZilla.
* Diagnosed and resolved problems associated with DNS, DHCP, VPN, NFS, and Apache.
* Troubleshooting user SSH and user authentication. Configuring OpenSSL.
* KickStart servers based off RHEL 6.x / 7.x in production, development and testing environments.
* Deployed the artifacts stored in the Nexus to the Apache Tomcat Server.
* Writing shell/Bash scripts for Automated Back- ups and Cron Jobs.
* Maintained Virtual servers in VMware environment.
* Participate in installing and configuring UNIX/LINUX based Oracle 10g products.
* Responsible for resolving network issues using network tools like ping, TCP traceroute and TCP dump. ManageD security of servers.
* Production support of Apache and JBoss including installation, configuration, and troubleshooting
* Implemented RAID 1 and 5 on mission critical servers such as domain controllers and file servers.
* Setup of full networking services and protocols on UNIX, including NIS/NFS, DNS, SSH, DHCP, NIDS, TCP/IP, ARP, applications, kick-start and print servers to ensure optimal networking, application, and printing functionality.
* Performed troubleshooting of CPU bottle necks, memory bottlenecks and gave suggestions on performance improvements. Analyzed performance issues through PERFPMR.
* Managing systems routine backup, scheduling jobs like disabling and enabling cron jobs, enabling system logging, network logging of servers for maintenance, performance tuning, testing.
* Log file was managed for troubleshooting and probable errors. Responsible for reviewing all open tickets, resolve and close any existing tickets.
* Document solutions for any issues that have not been discovered previously.

**Education**: **Texas Woman’s University. Denton, Texas**

**Bachlor’s in Science, Major In Computer Science .**