

## AWS DevOps Engineer

### PROFESSIONAL SUMMARY

- Overall, **6+ years** of extensive experience in Automating, configuring, and deploying instances on cloud environments and Data centers. Experience in the areas of **DevOps**, CI/CD Pipeline, Build and release management, **AWS**, and **Linux/Windows Administration**.
- Involved in designing and deploying applications utilizing almost all the **AWS** stack (Including **EC2, S3, Route53, ELB, EBS, VPC, RDS, DynamoDB, SNS, SQS, IAM, KMS, Lambda, Kinesis**) and focusing on **high-availability, fault tolerance** and **auto-scaling** in **AWS Cloud Formation**, deployment services (**OpsWorks** and **Cloud Formation**) and security practices (**IAM, CloudWatch, CloudTrail**).
- Implemented multiple **CI/CD** pipelines as part of DevOps role for on-premises and cloud-based software using **Jenkins, Chef** and **AWS/Docker**.
- Configured and managed Elastic Load Balancing (**ELB**) to implement fault tolerance and avoid single point of failure of applications, thus providing high reliability and efficient usage.
- Production experience in large environments using configuration management tools like **Chef, Ansible** and **Puppet** supporting **Chef** Environment with 500+ servers and involved in developing **manifests**. Developed **Chef Cookbooks** to manage systems configuration.
- Experience in developing **puppet** modules (blueprints) for installation, configuration, and continuous integration (**CI**) using combination of puppet master, **git, Openstack** (Horizon), and **Jenkins**.
- Experience with container-based deployments using **Docker**, working with **Docker images, Docker Hub** and **Docker-registries** and **Kubernetes**.
- Continuous Delivery setups with **Puppet** by creating manifest and maintain templates for different environments. Migration of shell scripts into **Puppet Manifests**.
- Created **Python** scripts to create the snapshots on **AWS S3** buckets and delete the old snapshots.
- Implemented **CI/CD** for **J2EE, SOA** & Micro services Architecture Environment (**NodeJS, .Net Core, Zookeeper, Kafka, Redis**) using **Jenkins**.
- Involved in **JIRA** as defect tracking system and configure various workflows, customizations and plugins for **JIRA** bug/issue tracker, integrated **Jenkins** with **JIRA, GitHub**.
- Involved in the functional usage and deployment of applications in **WebLogic, WebSphere**, and **Apache Tomcat Server**.
- Experienced in **Bash, Perl, Python, Ruby** scripting on Linux.
- Experience in administering and maintaining **Linux** servers in production environments. Supported in installation of packages/patches on **Linux** platforms. Implemented Backup & Disaster recovery management on **Linux** platforms.
- Experience of the full **Software Development Life Cycle (SDLC)**. Also experienced the Methodologies & Validations to ensure Quality Assurance Control.
- Experienced in configuration and maintenance of common Linux services such as **Tomcat, Apache, MySQL, NFS, FTP, Postfix, LDAP, DHCP, DNS BIND, HTTP, HTTPS, SSH, iptables** and **firewall** etc.
- Experienced with principles and best practices of Software Configuration Management (**SCM**) in **Agile, scrum, and Waterfall methodologies**.

### TECHNICAL SKILLS

Operating Systems	RHEL/CentOS, Ubuntu/Debian/Fedora, Sun Solaris 7/8/9/10, Windows Server 2003/2008/2010
Cloud	AWS, Azure
Scripting	Bash, Shell, Ruby, PowerShell, Python, YAML
Build/Automation	Ansible, Chef, Puppet, Jenkins, Maven, Ant
Databases	MySQL, SQL Server, MongoDB, PostgreSQL, Cassandra
Bug Tracking	JIRA, Remedy
Version Control	GIT, Subversion, TFS
Web/App Server	Apache, IIS, TFS, Tomcat, WebSphere Application Server
Web/Programming	Servlets, JDBC, JSP, XML, HTML, .Net, Java Script, Java/J2EE, C, C++, Perl scripting, Python, Shell, Ruby, YAML

## EDUCATION

Bachelor of Technology, Electronics and Communications Engineering

GITAM University, India

## PROFESSIONAL EXPERIENCE

ON Semiconductor – San Jose, CA

Sept 2019 – Present

Sr. Cloud / DevOps Engineer

- Involved in AWS **EC2/VPC/S3/SQS/SNS** based automation through **Terraform, Ansible, Python, Bash Scripts**. Adopted new features as they were released by Amazon, including **ELB & EBS**.
- Experienced **Cloud** and **DevOps** engineer in Automating, Configuring, and deploying instances on **AWS, AZURE** Cloud environments and Data centers.
- Configuring the monitoring and alerting tools according to the requirement like **AWS CloudWatch, AWS CloudTrail, Dynatrace, Nagios, Splunk Enterprise, SNMP** monitoring for the **VPN** connections.
- Written **Cloud Formation Templates** (CFT) in **JSON** and **YAML** format to build the **AWS** services with the paradigm of Infrastructure as a Code.
- Create automation and deployment templates for relational and **NoSQL** databases including **MSSQL, MySQL, Cassandra, and MongoDB** in **AWS**.
- Configuring, automation and maintaining build and deployment **CI/CD** tools **git/ git-Lab, Jenkins/Hudson, ANT, Maven, Build Forge, Docker-registry/daemon, Nexus** and **JIRA** for Multi-Environment (Local/POC/NON-PROD/PROD) with high degrees of standardization for both infrastructure and application stack automation in **AWS** cloud platform.
- Used **AWS Beanstalk** for deploying and scaling web applications and services developed with **Java, PHP, Node.js, Python, Ruby**, and **Docker** on familiar servers such as **Apache, and IIS**.
- Orchestrated and migrated **CI/CD** processes using **Cloud Formation** and **Terraform** Templates and Containerized the infrastructure using **Docker**, which was setup in **Vagrant, AWS** and **VPCs**.
- Developed microservice on boarding tools leveraging **Python** and **Jenkins** allowing for easy creation and maintenance of build jobs and **Kubernetes** deploy and services.
- Implemented a production ready, load balanced, highly available, fault tolerant, auto scaling **Kubernetes AWS** infrastructure and **microservice** container orchestration.
- Debugged **Chef Recipes** and their execution trying to pull logs into **Splunk** and monitor deployments.
- Automated the cloud deployment using **Chef, Python** and **AWS Cloud Formation** Templates. Used **Chef** for unattended **bootstrapping** in **AWS**.
- Utilized **Jenkins pipelines** to drive all microservices builds out to the **Docker registry** and then deployed to **Kubernetes**, Created **Pods** and managed using **Kubernetes**.
- Built **Docker** container clusters managed by **Kubernetes Linux, Bash, GIT, Docker**, on **GCP (Google Cloud Platform)**. Utilized **Kubernetes** and **Docker** for the runtime environment of the **CI/CD** system to build, test deploy.
- Installed and Implemented **Ansible** configuration management system. Used **Ansible** to manage Web applications, Environments configuration Files, Users, Mount points and Packages.
- Maintained high availability clustered and standalone server environments and refined automation components with scripting and configuration management (**Ansible**) and experienced in writing **Ansible scripts**.
- Created **Chef Cookbooks** and wrote recipes in **Ruby** Script to install and configured Infrastructure across environments and automated the process using **Python Script**.

Wells Fargo – Houston, TX

Sep 2018 – Aug 2019

AWS DevOps Engineer

- Designed **AWS** Cloud Formation templates to create custom sized **VPC**, subnets, **NAT** to ensure successful deployment of Web applications and database templates.
- Virtualized the servers on **AWS** using the **Docker**, create the **Docker** files and version control to achieve Continuous Delivery goal on high scalable environment, used **Docker** coupled with load-balancing tool **Nginx**.
- Experience with setting up **Chef** Infra, **bootstrapping** nodes, creating, and uploading recipes, node convergence in **Chef SCM**.

- Written **Chef Cookbook**, recipes to automate installation of Middleware Infrastructure like **Apache Tomcat, JDK** and configuration tasks for new environments etc.
- Wrote **Chef** recipes and deployed cookbooks for Web Logic, JDK 1.7, and Jenkins, tomcat, JBoss and deployment automation.
- Using **Chef**, deployed and configured **Elasticsearch, LogStash and Kibana (ELK)** for log analytics, full text search, application monitoring in integration with **AWS Lambda** and **CloudWatch**.
- Managed Amazon instances by taking **AMIs** and performing administration and monitoring of the Amazon instances like **EC2** using Amazon **CloudWatch** and **Nagios, Splunk**.
- Troubleshooting Issues related to **Cluster** deployments, managing **Cluster** nodes for Physical issues and escalating issues to respective vendors.
- Setting up private networks and sub-networks using Virtual Private Cloud (**VPC**) and creating security groups to associate with the networks.
- Developed automation scripting in **Python** (core) using **Puppet** to deploy and manage Java applications across Linux servers.
- Created and updated **Puppet manifests** and modules, files, and packages stored in the **GIT** repository. Writing various **puppet** manifests files with **Hiera** and customized functions and defined resources
- Scheduled the **Linux Cron jobs** and **Jenkins** jobs for **build** automation. Developed **Perl** and **shell** scripts for automation of the build and release process.
- **Deployed** and **troubleshoot** of various **Jenkins** issues. Installed and uninstalled, upgraded, and downgraded various **plugins** in **Jenkins**.
- Assisted developers with establishing and applying appropriate branching, labeling conventions using **GIT** source control.
- Maintained build related scripts developed in shell for **Maven** builds. Created and modified build configuration files including **POM.xml**.
- Setup a **Jumpstart/Flash** and **Kickstart** servers for provisioning of servers with different profiles.
- Installation of Red Hat EL 4.x, 5.x using **Kickstart** and **PXE** on HP DL380 G3.
- Performed backup and administration activities for **SVN/GIT** branching, merging, tagging.

Nimble Lifetech Pvt. Ltd. – Noida, India

Sep 2017 – Aug 2018

Linux Administrator

- Administration of **Windows Servers**, Domains, **Active Directory**, **DNS**, **DHCP**, **SMTP**, SharePoint, System Center, Lync, and Exchange
- Conduct day-to-day tasks in **RHEL** that included upgrading **rpms**, **kernel**, **HBA driver**, **configuring SAN Disks**, multipathing and **LVM** file system.
- Installing and updating packages using YUM (custom YUM servers/repositories) and **Red Hat Satellite Server**.
- Installation and configuration of Red hat Cluster, Veritas Cluster Server and Veritas **NetBackup**, **Apache**, **Tomcat**, **WebLogic 9, 10**, and **JBoss**.
- **Monitors system capacity & performance** and takes appropriate action to report and correct all issues.
- Implementing **Kickstart/PXE-boot configuration** for automating Linux installations
- Plan, build, document, and support new infrastructure including **VMware** and **vSphere** virtualization servers, new fileserver, and other resources.
- Automate processes including full and incremental backups using tar and star; migrate and enlarge file systems on **Red hat** and **CentOS**.
- Administered Linux servers for several functions including managing **Apache/Tomcat server**, **mail server**, **MySQL databases** in both development and production.
- Manages Patches **configuration**, **version control**, **service pack** and **reviews connectivity issues** regarding **security** problem and did network management **TCP/IP**, **NIS**, **DNS**, **NFS**, **VLAN**.
- Monitoring health of infrastructure servers and mission-critical using **Nagios XI**.
- Providing solutions to the client about **Disk mirroring** and **RAID** implementation using **LVM**.
- Setup **NFS File Systems** and shared them for Clients, Maintenance of **NFS Server** with **Auto Mounts**.
- Serve as regional support for project's Team Foundation Server environment including **configuration**, **maintenance**, and **performance analysis**.

- Installation, configuration, and maintenance of **RedHat Linux servers**.
- Performed server installation using Network-Based **Kickstart** and DVD on **physical servers, VMware and OVM**.
- Responsible for providing **3backup support** across 5 environments of approximately 500+ servers.
- Implemented and configured network services such as **HTTP, DHCP, and TFTP**.
- Installed and configured **Kickstart, DHCP, DNS (BIND, MS), web (Apache, IIS), mail (SMTP, IMAP, POP3), and file servers on Linux servers**.
- Harden operating system by installing recommended **patches**, monitor the servers by using **TCP dump**, disable services in a bid to minimize and or eliminate unauthorized server access.
- Developed **shell scripts** to automate repeatable tasks; used **bash shell scripting** to manage directories, files, users, and applications.
- Expert on setting up and maintaining **Active Directory**.
- Install, configure, and support Enterprise network/server monitoring tools. (**Manage Engine/Site 24x7, SolarWinds, CA, Nagios**)
- Monitoring **CPU, memory, iSCSI disks, disk controllers, physical disk, HW and SW RAID, multipath, file systems**, network using the tool **NAGIOS**.
- Developing scripts to be executed as checks by **Nagios** for execution in both **Windows and Linux** environments.