Nithish Chandra

AWS DevOps Engineer

Ph No +1 (832) 736-5193

Email ID: chandranithish11@gmail.com

aws ✓ CERTIFIED

PROFESSIONAL SUMMARY

- Overall, 7 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**).
- Experienced in cloud automation using**, AWS cloud Formation Templates**, **Chef, Puppet**.
- Implemented multiple **CI/CD** pipelines as part of DevOps role for on-premises and cloud-based software using **Jenkins, Chef and AWS/Docker.**
- Involved heavily in setting up the **CI/CD** pipeline using **Jenkins, Maven, Nexus, GitHub, Puppet, Terraform** and **AWS.**
- 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.
- **Kubernetes** is being used to orchestrate the deployment, scaling and management of **Docker** Containers.
- Used **Jenkins pipelines** to drive all microservices builds out to the **Docker registry** and then deployed to **Kubernetes**, Created **Pods** and managed using **Kubernetes.**
- Building/Maintaining **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.
- **AWS** and **OpenStack** to provision new machines for clients. **S3** Storage Services on **AWS.**
- Developed microservice on boarding tools leveraging **Python** and **Jenkins** allowing for easy creation and maintenance of build jobs and **Kubernetes** deploy and services.
- 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.
- Written **Chef Cookbooks**, recipes to automate installation of Middleware Infrastructure like **Apache Tomcat**, **JDK** and configuration tasks for new environments etc.
- Experience in developing **puppet** modules (blueprints) for installation, configuration, and continuous integration (**CI**) using combination of puppet master, **git**, **R10K wrapper**, **Openstack** (Horizon), **Vagrant** and **Jenkins**.
- Continuous Delivery setups with **Puppet** by creating manifest and maintain templates for different environments. Migration of shell scripts into **Puppet Manifests**.
- Wrote **Puppet** code to provision infrastructure including **LAMP** stacks, **Oracle middleware, Artifactory and Docker.**
- Move development application from **Docker containers** and deploy into production **Cloud Foundry** environment.
- Experience in Configuration Management, Cloud Infrastructure, and Automation like **Amazon Web Services (AWS), Ant, Maven, Jenkins, Chef, SVN, GitHub, Clear Case, Tomcat, and Linux.**
- Utilize Cloud formation and **Puppet** by creating DevOps processes for consistent and reliable deployment methodology.
- Setup the **Python** scripts to create the snapshots on **AWS S3** buckets and delete the old snapshots.

- 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**.
- Having good hands-on experience with Apache **Kafka**
- 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.**
- Extensively 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.
- Troubleshooting any build issue with **ELK** and work towards the solution.
- 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.
- Strong understanding in writing the automation of processes using the shell script with **bash** and **Python**
- Building servers with **jumpstart** using **Kickstart**, CD on timely basis, along with corporate wide requirements
- Experienced with principles and best practices of Software Configuration Management **(SCM)** in **Agile, scrum, and Waterfall methodologies**.

Technical Skills

Cloud Services	**Amazon Web Services (AWS), OpenStack, Google Cloud Platform (GCP)**
Virtualization	**VMware ESX/ESXI, Windows Hyper-V, vSphere, Datacenter Virtualization, Power VM, Virtual Box, Citrix Xen, KVM.**
Operating Systems	**Red Hat Linux, CentOS, Fedora, SUSE LINUX, UNIX, Windows, Windows, Ubuntu, Sun Solaris, HPUX 10.x/11.x**
Automation/configuration Tools	**Chef, Puppet, Docker, Vagrant, Ansible, Jenkins, Hudson, Bamboo, Kickstart, Jumpstart, Terraform, Kubernetes, ANT, Maven.**
Web Servers	**Apache Tomcat, JBOSS, Web Logic, WebSphere Apache, Apache, and NGINX, IIS**
Database Technologies	**DB2, SQL Server, MySQL, RDS, NoSQL- MongoDB, Cassandra DB, DynamoDB**
Scripting languages	**Ruby, Python, Perl, PHP, Bash/shell Scripting, PowerShell Scripting YAML, JSON.**
Networking/Protocol	**FTP/SFTP, SMTP, TCP/IP, HTTP/HTTPS, NDS, DHCP, NFS, Cisco Routers, Juniper Routers**
Version Control Tools	**GIT, Bitbucket**
Monitoring Tools	**Nagios, Splunk, Elasticsearch, Logstash and Kibana (ELK), CloudWatch, Cloud Trial**

Professional Experience

Sr. Cloud / DevOps Engineer

ON Semiconductor

San Jose, CA	**September 2019 to Present**

Roles and Responsibilities:

- Experienced **Cloud** and **DevOps** engineer in Automating, Configuring, and deploying instances on **AWS, AZURE** Cloud environments and Data centers.
- Expertise in 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.
- Configure **ELK** stack in conjunction with **AWS** and using LogStash to output data to **AWS S3**
- 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**.
- DevOps role converting existing AWS infrastructure to Server-less architecture **(AWS Lambda, Kinesis)** deployed via **terraform.**
- Experience in Virtualization technologies like **VMWare**, **Vagrant** and worked with containerizing applications like **Docker, Kubernetes**.
- 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.
- Experience with container-based deployments using **Docker**, working with **Docker images, Docker Hub** and **Docker-registries** and **Kubernetes**.
- Experience with setting up **Chef** Infra, **Boot strapping** nodes, creating, and uploading recipes, node convergence in **Chef SCM**.
- Created private cloud using **Kubernetes** that supports **DEV, TEST**, and **PROD** environments.
- Implemented a production ready, load balanced, highly available, fault tolerant, auto scaling **Kubernetes AWS** infrastructure and **microservice** container orchestration.
- Debugging **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**.
- 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.**
- Implemented and maintained **Ansible** Configuration management spanning several environments in **Vrealize** and the **AWS** cloud.
- Configured **Subclipse** (Subversion plugin for Eclipse) and trained developers to utilize its various features Extensively used **Ant**, **Maven**, **Perl,** and **Bash** Scripts for automating build and release tasks.
- Integration with **Splunk** for API traffic monitoring and health checks.
- Played a key role in converting 600+ existing **Jenkins** jobs into the new pipeline process.
- Prepared document on process of migrating **Jenkins** jobs from development environment to production server.
- Created **Chef Cookbooks** and wrote recipes in **Ruby** Script to install and configured Infrastructure across environments and automated the process using **Python Script**.
- Involved in Setting up **Chef Workstation**, **boot strapping** various enterprise nodes, setting up keys.

- Created **Puppet Manifests** to provision **Apache** Web servers, **Tomcat** servers, **Nginx**, **Apache Spark,** and other applications.

Environment: Red hat Linux 7.x, AWS, Chef, puppet, Docker, Ansible, Jenkins, Kickstart, Jumpstart, Terraform, Kubernetes, ANT, Maven**,** Ruby, Shell, Python, WebLogic Server 11g, Load Balancers, WLST, Apache Tomcat 7.x, Virtualization, Configured plug-ins for Apache HTTP server 2.4, Nginx, LDAP, JDK1.7, XML, SVN, GitHub, Nagios, Splunk**.**

AWS DevOps Engineer

Wells Forgo

Houston, TX **January 2019 to August 2019**

Roles and Responsibilities:

- Experience in Automating, Configuring, and deploying instances on **AWS and Azure** Cloud environments.
- 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.
- Written 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.

Environment: AWS, Chef, Puppet, Jenkins, Maven, ANT, Ruby, Shell, Python, WebLogic Server 11g, Load Balancers, WLST, Apache Tomcat 7.x, Docker, Virtualization, Configured plug-ins for Apache HTTP server 2.4, Nginx, LDAP, JDK1.7, XML, SVN, GitHub, CloudWatch, Splunk.

DevOps Engineer

Accenture

Hyderabad, India   **March 2017 - August 2018**

Roles and Responsibilities:

- Involved in DevOps migration/automation processes for build and deploy systems.
- Implemented continuous integration using **Jenkins.**
- Automated apache-webserver configuration, DB server configuration, SSSD configuration **LAMP** by writing ruby cookbooks in **chef.**
- Managed **Chef Server** in pushing the infrastructure change to client nodes, monitoring the logs and security.
- Worked on using **Chef Attributes, Chef Templates, Chef Recipes**, and Chef Files for managing the configurations across various nodes.
- Well used and experience in deploying the code through web application servers like **Apache Tomcat** and **NGINX**.
- Provide CM and Build support for applications, built, and deployed to lower and higher environments.
- Developed build and deployment scripts using **MAVEN** and **Gradle** as build tools in **Jenkins** to move from one environment to other environments.
- Deployed **Chef** Dashboard for configuration management to infrastructure
- Involved in Building and configuring Red Hat Linux Servers using **Kickstart** server as required for the project.
- Implemented **Nagios** monitoring solution for mission critical server. Monitored the server and application using **Nagios**, and **Splunk.**
- Implemented and configured **Nagios** for continuous monitoring of applications in the production environment and enabled notifications via emails and text messages.
- Wrote JUnit test cases for unit, integration, and functional tests, run automatically by **Hudson/Jenkins** in the builds triggered by each push to **GIT**.
- Automate the code review process and published the results on **Jenkins** as well the graph by comparing everyday nightly builds
- Managed **GIT** repositories for branching, merging, and tagging.
- Configured **GIT** with **Jenkins** and schedule jobs using POLL **SCM** option and integrated to automate the code checkout process.
- Experience with **Agile** to develop and work with the client to calibrate releases for test deployment.
- Created Branches, Labels and performed Merges in **Stash** and **GIT**.
- Developed processes, tools, automation for **Jenkins** based software for build system and delivering SW Builds.
- Built and deployed J2EE application in **JBoss** in an **agile** continuous integration environment using **Python** scripts
- Involved in the development of **Bash shell scripts** to automate repetitive tasks.
- Installed and configured **Jenkins** for Automating Deployments and providing an automation solution.
- Integrated **GIT** into **Jenkins** to automate the code checkout process.
- Maintained and administered **GIT** source code tool.

Environment: RHEL, Solaris, Python, JBoss, Chef, Nagios, Splunk, Kickstart, Hudson, Jenkins, Ruby, GIT, Veritas, SVN, Ant, Bash/shell scripts, JIRA.

Build & Release Engineer   **July 2015 – February 2017**

TCS

Hyderabad, India.

Roles & Responsibilities:

- Administered **Bamboo** servers which include install, upgrade, backup, adding users, creating plans, installing the local/remote agent, adding capabilities, performance tuning, troubleshooting issues, and maintenance.
- Setting up continuous integration and formal builds using **Bamboo** with **the Artifactory** repository and Resolved update, merge and password authentication issues in **Bamboo** and **JIRA**.
- Developed and implemented build and deployment process using **Bamboo** in various environments such as QA, UAT, PROD using Bamboo.

- Used **Puppet** to manage Web Applications, Config Files, Data Base, Commands, Users Mount Points, and Packages.
- Used **Puppet** for creating scripts, deployments for servers, and managing changes through **Puppet master** server on its clients.
- Developed the **scripts** to push patches, files and maintain configuration drift through the **Puppet** tool.
- Designed and scripting using **ANT** for J2EE, Web Services, Reusable JARS, Web Client and Open Source in creating Master build.xml build Properties & pom.xml files and provided technical support to the development team for compilation problems.
- Initiated responsibility for administering the **SVN** servers which included install, upgrade, backup, adding users, creating repository/branches, merging, writing hooks scripts, performance tuning, troubleshooting issues, and maintenance. Implemented a **GIT** mirror for SVN repository, which enables users to use both SVN and GIT.
- Integrated **JIRA** with **SVN** and created automated release notes using **Perl Scripts**.
- Wrote, maintained, and documented modules, manifests, **Git repositories** for **Puppet** enterprise on **RHEL** and **Windows** platforms.
- Involved in troubleshooting the automation of installing and configuring **Java** applications in the test and production environments.
- Reviewed existing manual Software builds, developed scripts to automate repeated tasks that are more susceptible to errors and risk using **Perl** and **Shell Scripting**.
- Administered **Nexus server** which includes installing, upgrade, maintenance of repositories, performance tuning, troubleshooting issues, and maintenance.
- Used **Bugzilla** for bug tracking and reporting, also followed up with the development team to verify bug fixes, and update bug status.
- Development of Scheduled tasks and **UNIX** scripts and **Perl** to maintain and automate the Build process.
- Involved in Building and configuring **Red Hat Linux** Servers using **KickStart** server as required for the project. Maintained maximum uptime and maximum performance capacity for enterprise prod, **QA,** and **UAT/staging.**

Environment: Puppet, **SVN**, **GIT**, **ANT**, **Jira**, **Perl**, **Shell**, **Bamboo**, **RHEL**, **Windows**, **Bugzilla**, **Nexus**.

Nimble Lifetech Pvt. Ltd. – Noida, India   **December 2014 – April 2015**
Linux Administrator

Responsibilities:

- 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.
- Senior-level **Administration** of 90+ high-level world-wide **virtual systems**.
- 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.**

Environment: RHEL6.3,6.4,6.5, KeyVault, ServiceBus, kickstart, NetBackup, Apache/Tomcat, PowerShell, Nagios,
LVM, VMware, DNS, AD, DHCP, RAID, LVM, NFS, VMware.

Fintek Software Solutions Pvt. Ltd., Chandigarh India (Intern)   **May 2014- August 2014**
System Administrator

Responsibilities:

- 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 3**backup 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.

Environment: Windows Server, RedHat Linux, Apache, VMware, OVM, kickstart, Apache, SolarWinds, IIS, Nagios, Shell, DHCP, shell, bash, AD.

Education

Master of Science, Computer Engineering   GPA: 3.4/4.0   **December 2019**

University of Houston Clear Lake, Houston, Texas.

Bachelor of Technology, Electronics and Communications Engineering GPA: 3.5/4   **May 2015**

GITAM University, Visakhapatnam, INDIA.