**Harika P**

**PROFESSIONAL SUMMARY**

* **Experienced DevOps professional (5+ years**) with expertise in IT Infrastructure Maintenance, **Linux Administration**, **Cloud Computing**, **Configuration Management**, **Virtualization**, **Containerization**, **Build** and Release Maintenance, Networking, Deployment Automation and Troubleshooting compliant with general **Software Development Lifecycle** (SDLC) and **Agile Methodology** practices.
* Managed **Amazon Web Services (AWS)** infrastructure, deployment with automation and configuration management tools such as **Terraform**, **Puppet, Chef.**
* Designing cloud-hosted solutions, specific **AWS** product suite experience.
* Understanding of secure-cloud configuration **(CloudTrail, AWS Config), networking services (VPC, Security Groups, VPN etc.), created roles (IAM)** and experience in AWS developer tools such as **CodeCommit, CodePipeline, CodeDeploy, CodeBuild** etc
* Used Cloud Watch to monitor server services like **logs, CPU, RAM and disk storage.**
* Used **Docker, Kubernetes** and **OpenShift** to manage micro services for continuous integration and continuous delivery.
* Used Pods, Master and Minion in **Kubernetes**. Master serves RESTful **Kubernetes** API that validates and configures Pod, Service, and Replication Controller in **Kubernetes**.
* Deployed **Kubernetes Clusters** on cloud/on-premises environments with master/minion architecture and wrote many

**YAML** files to create many services like **pods, deployments, auto scaling, load balancers, health checks, Namespaces**.

* Experienced in installing, configuring and managing **Docker Containers**, **Docker Images** for web servers and

applications servers such as **Apache Tomcat, WebSphere** using **Docker** and integrated with **Amazon MySQL RDS**

database.

* Experience in Database software’s such as **Oracle RDBMS**, **MYSQL** and **Microsoft SQL server**.
* Handled configuration-management, application deployment, cloud provisioning, ad-hoc task-execution, and multi node orchestration using **Ansible and** **chef** and **puppet.**
* Responsible for creation and management of **Ansible** Playbooks and **Chef** Cookbooks.
* Extensive experience on **Jenkins (Jenkins Pipelines)** for continuous integration and end to end automation for all build and deployments.
* Worked with Version Control Systems like **GIT, CVS, SVN and TFS**.
* Knowledge in **VSTS**, TFS, Gated Check - ins, Build Definitions, Release Management, **PowerShell**.
* Expertise on **VSTS** to automate the build, test, and deployment of an application and implement Continuous integration and deployment (CI/CD) pipeline.
* Experience in Installing, configuring and maintaining **Web Sphere** & **Web Logic Application Servers**.
* Worked on build scripts and automated solutions using scripting languages such as **Shell scripting** (Bash), **Python**, **Ruby**, PHP, PERL, XML, JSON.
* Good experience with networking fundamental on DNS, routing, subnets, VLANs, WAN.
* Knowledge with networking concepts and protocols such as **TCP**/**IP**, **UDP**, **ICMP**, etc., **MAC addresses**, **IP** packets, **DNS**, **OSI** layers, and **load balancing** is also needed.
* Experience in administration for various environments in **software development life cycle** (SDLC) **Windows, Linux, Solaris, Ubuntu,** and involved in developing manifests. Used Logical Volume Manager for the management of Volumes including creation of physical and logical volumes on Linux.
* Worked with **Nagios Log Server** for searching the log data and Set up alerts and sent email notifications about potential threats, retrieved log data in one location, with high availability and fail-over built right in. Quickly configured servers to send all log data with easy source setup.

**SKILLS**

* **Programming/Scripting Languages:** Python, JavaScript, Core Java, Bash
* **Database:** SQL, MySQL
* **Operating Systems:** Linux (Red Hat Enterprise, CentOS), Microsoft Windows
* **Build Tools:** Ant, Maven
* **Configuration Management:** Ansible
* **Infrastructure as Code:** Terraform
* **Continuous Integration:** Jenkins
* **Tracking/Testing Tools:** JIRA, Selenium
* **Monitoring Tools:** AppDynamics
* **Virtualization Tools:** VMware, Oracle VirtualBox, Hyper-V
* **Container Tools:** Docker, Kubernetes
* **Networking:** FTP, DNS, SSH, SMTP, TCP/IP
* **AWS Services:** IAM, EC2**,** Amazon Route53, CloudFront, VPC, ELB, Auto-Scaling, EBS, RDS, S3, Code Deploy, Elastic Beanstalk, CloudFormation, Lambda, CloudWatch, SNS, ECS

**PROFESSIONAL EXPERIENCE**

**Verizon | Irving, Texas, USA May 2019 – Till Date**

**AWS/DevOps Engineer**

* **Responsibilities:**
* Worked with Reliability Engineering Team to **deploy IBM Maximo application** for Asset Management in automated environments to minimize service downtime.
* Automated deployment of Application, Integration and Deployment servers in **WebSphere.**
* Developed programs, databases and procedures to integrate/automate necessary systems for development and operations (Dev + Ops) of software environments.
* **Developed code in Terraform** to provision cloud infrastructure using reusable terraform modules.
* **Developed SQL queries, bash and shell scripts** to automate tests of system software in development, test and production environments.
* Orchestrated automated pipeline builds for building system environments from scratch **using Jenkins by writing version-controlled code in groovy.**
* Configured **Jenkins** Monitor, List and Build views to displays the status and progress of selected jobs with build version information.
* Installed, modified and maintained systems and utility software on both on-premise as well as cloud servers.
* Provided server support related to both application and software.
* Well-versed with **Agile methodologies and Scrum frameworks.**
* Documented to describe program development, logic, coding and corrections.
* Reviewed and analyzed the efficiency of existing systems and develop strategies for improving or leveraging the use of upcoming DevOps tools optimized for **hybrid cloud environments.**
* Deployment of **Red Hat Enterprise Linux (RHEL) virtualization** 7.x environments along with troubleshooting, support.
* Installation, Configuration and Administration of **Jenkins on Linux machines**.
* **Build database models**, views and APIs using Python for interactive web-based solutions.
* Created **AMIs using Packer** to be used by Terraform to build **AWS infrastructure**.
* Worked in a strictly Agile environment, providing updates on work in progress, work completed, and work planned, reporting issues that might potentially impact delivery schedules or quality of project while constantly trying to improve process workflows with every iteration of project sprint.
* **Used Kubernetes to manage containerized applications** using its nodes, ConfigMaps, selector, Services and deployed application containers as Pods.
* Worked on migration with **SVN to GitHub for better user experience for code pull/commits/merges and versioning.**
* Handled end-to-end Unit Testing and collaborate with various teams for Integration Testing for major releases.
* **Maintained documentation** of all necessary build information for collaboration with various teams using **Confluence.**
* Experience in AWS **deployments for web apps** as CI/CD environments to ensure High Availability and Fault Tolerance.
* Utilized **Ansible** and **AWS lambda, Elastic Cache** and **CloudWatch logs** to automate the creation of log aggregation

pipeline with **Elastic Search, Logstash, Kibana (ELK)** stack to send all our teams logs coming into **CloudWatch** to

process them and send them off to **Elastic Search**.

* Used Amazon **IAM** to grant fine-grained access to AWS resources to users. Also, **managed roles and permissions** of

users to AWS account through IAM.

* Setup Log Analysis **AWS Logs** to **Elastic Search** and **Kibana** and manage searches, dashboards, custom mapping and

automation of data.

* Implemented **cluster services** using **Docker** and **Kubernetes** to manage local deployments by building a

self-hosted **Kubernetes** cluster using **Terraform** and **Ansible**.

* Worked on **JIRA agile** **projects** like configured columns, filters and reports for sprints. Used **JIRA** as a **change**

**management**/ work management/ **SCRUM Agile Tool**.

* Resolved update, merge and password authentication issues in **JIRA**. Monitor scalable infrastructure on **Amazon**

**web services (AWS)** & configuration management using **Ansible**.

**Environment:** Jenkins, Terraform, AWS infrastructure, Linux, Git, SQL, WebSphere, Python, Agile Methodologies**,** Groovy, Scrum Frameworks, Puppet, Bash, Shell Scripts, RHEL, GitHub.

**MetLife | Chennai, Tamil Nadu, India March 2015 – August 2018**

**DevOps Engineer**

* **Responsibilities:**
* Worked on **AWS CLI Auto Scaling and Cloud Watch Monitoring** creation and update.
* Allotted permissions, policies and roles to users and groups using **AWS Identity and Access Management (IAM).**
* Managed hardware, software, and networking for a large-scale cluster on **Amazon EC2.**
* Storage on AWS EBS, S3 and Glacier and automate sync data to Glacier. Databases services on AWS like **RDS, Dynamo DB and Aurora**. Elastic Transcoder, Cloud front, Elastic Beanstalk. Migration of 2 instances from one region to another. Configuration of site- to- site VPN and open VPN using Linux EC2 instance.
* Installed, configured and managed the ELK (Elastic Search, Log Facilitated Scrum ceremonies like Sprint planning, retrospectives, Daily stand-ups, Stash and Kibana) for Log management within EC2/ Elastic Load balancer (ELB) for Elastic search.
* End to End solution for hosting the web application on **AWS cloud with integration to S3 buckets**
* **Integration of web portal and users** associated with S3 bucket.
* Used Amazon S3 to backup database instances periodically to save snapshots of data.
* Developed and implemented **Software Release Management strategies** for various applications according to the **agile process.**
* Used DNS management in **Route53.**
* Built python automation scripts to apply OS patching for EC2 instances for security upgrades.
* Managing AWS Infra and automation with **CLI, API**. Managing Data Center **Inbound and outbound services.** Working on automation tools like **Ansible.**
* Worked with the development team to generate deployment profiles **(jar, war, ear) using Maven Scripts and Jenkins.**
* Implemented a Continuous Delivery framework using **Jenkins**, **Ansible**, **Maven** in **Linux environment.**
* Used **Ansible** to manage Web applications, environments configuration files, users, and Packages. Setup Continuous

Delivery pipeline using **Ansible playbooks**. This primarily consists of a **Jenkins** to run packages and various supporting software components such as **Maven**.

* Written **Maven** buildtoolsfor **application layer** modules.
* Involved in **editing the existing MAVEN files in case of errors** or changes in the project requirements.
* Experienced in authoring **pom.xml** files, performing releases with the **Maven release plugin**, and managing artifacts in **NEXUS** repository.
* Used Maven dependency management system to deploy snapshot and release artifacts to **Nexus** to share artifacts across projects and environments.
* Used Jenkins for Continuous Integration and deployment into Tomcat Application Server.
* Created a best practice Build environment using **Jenkins**, immutable instances, and **AWS**.
* Developed Ansible scripts for an **automated server provisioning** and Docker images, reducing the time between provisioning and deployment from over 3 hours to less than 10 minutes.
* Wrote Ansible Playbooks with Python SSH as the Wrapper to Manage Configurations of AWS Nodes and Test Playbooks on AWS instances using Python. Run Ansible Scripts to provision Dev servers.
* Worked with automation/configuration management using Ansible create playbooks to automate the

development processes.

* Built **Jenkins** **jobs** to create **AWS** infrastructure from **GitHub** repos containing **terraform** code. Generating **Artifacts**

by integrating **Jenkins** with **Git** and **Maven** and storing artifacts into **Nexus** and deploying into application server.

* Configured the Ansible playbooks with Ansible Tower so that other users can run them with just a push of a button.
* Worked with **Red Hat Open Shift Container** Platform for Docker and Kubernetes.
* Experience in conducting auto deployment of software applications in secured and managed environment using

**container technology Docker.**

* 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.

* Experience in Maven compiling, testing and documenting the Scala code used for Apache Spark.
* **Developed Perl and Shell scripts** for automation of the build and release process.
* Worked on **installation and Configuration of Red Hat Linux OS, CentOS, Ubuntu**.
* Excellent communicative, interpersonal, intuitive, and analytic and leadership skills with ability to work efficiently in both the independent and teamwork environments.

**Environment:** EC2, Auto Scaling, route53, S3, IAM, RDS, ELK, CloudFormation, CloudWatch, Jenkins, Chef, Ansible, Docker, Kubernetes, Maven, Nagios, Nexus, Python Scripts, shell scripts, VMware, Red Hat Linux OS, CentOS, Ubuntu, Packer, AWS Services.

**State Street Global Advisors| Bangalore, India July 2014 – February 2015**

**Linux Administrator**

* **Responsibilities:**
* Supported the Production Linux Environment with over 600+ servers. Day to day tasks included routine maintenance, grading & patching of hosts, managing storage, and health check, Site recovery, Backup, new Server deployment & all other operational issues.
* Responsible for setting up the managing user accounts, security, rights, disk space, and process monitoring RedHat Linux.
* Did a health check of servers after patching / rebooting and checked all the services of Linux and Windows servers whenever we had reboots and code drops.
* Worked with L3 team to handle configuration and capacity planning, system performance analysis and optimization.
* Worked with Architect team to structure and maintain the firm's software and hardware requirements and business systems architecture.
* Involved in responding to the tickets and properly managing the ongoing issues.
* Interacted with IT groups and users on outages, critical issues and involved in providing the ETA for the resolution.
* Involved in CAB Meetings and Provided support in Infrastructure Upgrades and raised concerns if any issue to the upgrades.
* Involved in providing first and second Line of Support (Log Calls, Query Handling, Escalations).
* Created and modified users and groups with SUDO permission.
* Installation of third-party tools using packages.
* Maintained file systems, Checking and repairing file systems and monitoring file system usage.
* Viewing and controlling the Processes running on the system and automating repetitive tasks. User Administration by creating, maintaining User's accounts and groups, setting up User environments.

**EDUCATION**

**Texas A&M University, Commerce, Texas**

Master’s in Computer Science

**Narayana Engineering College, India**

Bachelor’s in Electronics & instrumentation