**RAGHURAM CHILAMAKURI AWS DevOps Engineer**

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**PROFESSIONAL SUMMARY:**

8+ years of experience in IT industry and expertise as **AWS** DevOps Engineer, Linux Programming Developer, build engineer and release management, automation software configuration management (**SCM**), Deploying Applications through Continuous Integration (**CI**) and Continuous Deployment (**CD**) and Managing Cloud Services like amazon web services, google cloud platform.

* Experienced in working on infrastructure platform for the application deployment which involves the services from **amazon web services (AWS)** like **EC2, EBS, VPC, RDS, API Gateway, AWS lambda, elastic container registry and elastic Kubernetes services** for frontend, backend and container orchestration of the web application.
* Experienced in working on the services from **Google Cloud Platform(GCP)**, for developing the infrastructure of the applications like e-commerce web application and serverless applications, migrating the on-prem data to google cloud platform, managing the data which is secure and scalable and containerizing the application with the help of services like **computer engine, virtual machines**, **app engine, storage bucket, Big query, data catalog, cloud storage, firebase, google container registry and google Kubernetes engine**.
* Experienced in Pivotal Cloud Foundry (**PCF**) on Azure **VM’s** to manage the containers created by **PCF**. Used **Docker** for deployment containers and push the code to **Azure Cloud**.
* Responsible for **OpenStack** project core infrastructure including code review, continuous integration systems, and developer tools and OpenStack **Multi**-**node Installation**, **Configuration** and **Administration**.
* Expert in various **Azure** services like Compute (Web Roles, Worker Roles), Caching, **Azure** **SQL**, No**SQL**, Storage, and Network services, Azure Active Directory **(AD), API** Management, Scheduling, Azure Auto Scaling, and PowerShell Automation.
* Experience in Installing, Configuring, Managing the Monitoring tools like **Splunk** and **Nagios** for Resource Monitoring.
* Experienced in working on container orchestration of the application deployment using the tools like **docker and Kubernetes**.
* Experience in working in configuration tools like C**hef and Puppet** for Developing roles to automate the services related to deployment.
* Automated setting up server infrastructure for the **DevOps** services, using **Ansible**, **shell** and **Python scripts**.
* Extensively worked on **Artifactory** and **Nexus** Repository Managers to deploy software built through **Jenkins** Build Jobs.
* Expertise in **Terraform** for building, changing, versioning infrastructure and collaborate the automation of **AWS** Infrastructure via **Terraform** and **Jenkins**.

**Technical Skills:**

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| **Programming languages** | C, Java, SQL |
| **Scripting Languages** | Shell, Bash, Python, Ruby, Groovy |
| **Versioning tools** | SVN, GITHUB, Bitbucket |
| **Automation tools** | Jenkins, Bamboo, Hudson, Terraform |
| **Build Tools** | Ant, Maven, Gradle |
| **Configuration Management Tools** | Chef, Puppet, Ansible |
| **Databases** | MYSQL, MSSQL, Oracle and MongoDB, DynamoDB |
| **Virtualization** | VMware, vagrant, Docker, Kubernetes, OpenShift |
| **Monitoring Tools** | Nagios, splunk |
| **Cloud technologies** | AWS, Azure, Google Cloud, PCF, Open stack |
| **Bug Tracking tools** | Bugzilla, Atlassian JIRA, Remedy, ServiceNow |
| **Repository Manager** | Nexus, JFrog Artifactory |
| **Web Servers** | Apache Tomcat, Nginx, JBoss, Web Sphere |
| **Operating Systems** | LINUX, Unix, Ubuntu, CentOS, Windows. |

**EDUCATION:** Bachelor of Technology in Information Technology, Sathyabama University, Tamilnadu, India - 2011

**PROFESSIONAL EXPERIENCE:**

**Site Reliability Engineer July 2020 – Till Date**

**Microsoft**

**Seattle, WA**

**Responsibilities:**

* Worked on **Continuous Integration and Continuous Delivery** in **Microsoft azure DevOps**.
* Worked on Build and Implementation of release pipelines, for deployment of application into **Azure Kubernetes Service.**
* Worked on configuring the **infrastructure** for the application environment in azure.
* Worked on **Azure container registry** for storing the **docker images** for the application build.
* Configured the **Azure AppInsights** for Monitoring and troubleshooting azure resources.
* Managed, configured **Azure Web Jobs** to run continues and scheduled tasks and wrote **ARM templates** to deploy **Azure Services**.
* Implemented Azure App Service Environment and configure **DNS** and Application Gateway to restrict applications and APIs to be accessible only from intranet
* Worked with **Terraform** key features such as Infrastructure as code, Execution plans, Resource Graphs, Change Automation.
* POC and create multiple **Terraform**modules to manage configurations, applications, and automate installation process on Azure
* Engage in and improve the whole lifecycle of services—from inception and design, through deployment, operation and refinement
* Support services before they go live through activities such as system design consulting, developing software platforms and frameworks, capacity planning and launch reviews.
* Maintain services by measuring and **monitoring availability, latency and overall system health.**
* Scale systems sustainably through mechanisms like **automation**, and evolve systems by pushing for changes that improve reliability and velocity.
* Practice sustainable incident response and blameless **postmortems**
* Development of custom CMDB architecture and interfaces via API and web GUI for virtual and physical devices.
* Migrated the current Linux environment to **AWS/RHEL Linux environment**and used auto scaling feature and Involved in Remediation and **patching of Unix/Linux Servers**
* Experience with system analysis, **troubleshooting**and **performance tuning**of operating systems.
* Configured network services like **DNS, DHCP, IPv4, IPv6, IPsec, VPN**, **TCP/IP**etc.
* **Hardening and Patching of Centos, RHEL and Solaris**servers. Patching in Linux using yum and in Solaris upgrading and patching on standalone servers using single user mode, and on production servers using an alternate boot environment ( **ABE**).
* Created and wrote shell scripts ( Bash), Ruby, Perl, Python and Power shell, JavaScript and XML for automating tasks.
* Run a single command on the nodes to provision the infrastructure of the organization using **Terraform**

**Senior AWS DevOps Engineer**

**Fidelity Investments August 2019 – June 2020**

**Durham, NC**

**Responsibilities:**

* Built Continuous integration pipelines using **Jenkins** as a frontend and Concourse for continuous deployment to local staging and test environments and to production environments on-demand, using a combination of **GIT, Docker, AWS tools, and shell scripting.**
* Collaborating with various teams in gathering requirements and suggesting infrastructure solutions based on necessity and financial constraints.
* Continually work towards making improvements in the release process and facilitate migration to a **Continuous Deployment/Continuous Integration** approach.
* Help define, develop, and maintain the cloud-based ecosystem underlying the **Managed account performance and portfolio services (MAPPS).**
* Experienced in **monitoring Jenkins builds, break/fix management, issue tracking, and identifying and resolving** a wide variety of build-related issues for different products.
* Contributing to **the research, evaluation, development, and application** of new processes and methods into products.
* Well versed in configuring and managing various **AWS services like EC2, VPC, S3, Glacier, CloudWatch, Route53, SNS, and IAM,** etc focusing on high-availability, fault tolerance, and auto-Scaling using cloud formation templates and validating the CFT templates using CFNAG before any deployment.
* Continuous deployment using Concourse with opinionated pipelines and multi-stack pipelines and deploy and break fixing it any stage during the deployment.
* Deployment of the Application cross-region and blue/green deployments that allow me to test the new versions in the **PROD** environment before exposure to the customers and on the other hand Canary analysis/testing allows testing the new features of the application to a small percentage of customers in a controlled environment.
* The full adoption of the **ITEC ALM tool stack** (**Bitbucket, Jira, Jenkins & Artifactory**) to reduce overall costs of managing separate instances and modernizing teams on the latest tools offered firm-wide and reducing the offerings of the legacy versions of these tools.
* Experienced with working on the enterprise tools like, **Rational Team Concert and Jenkins** for continuous integration of the application.

**Environment**: AWS (EC2, S3, Lambda, VPC, EBS, RDS, ALB etc), GIT, Bitbucket, Jenkins, Maven, Concourse, Jfrog Artifactory, Nexus, RHEL, Ubuntu, Windows, CFT, Docker, Cloud Watch, Datadog, Splunk, Intellij, Bash scripting, and Python, Jira, Agile and AMES frameworks.

**AWS DevOps Engineer**

**Point72 Asset Management June 2017- July 2019**

**Stamford - CT**

**Responsibilities:**

* Worked on tagging standard for proper identification and ownership of EC2 instances and other **AWS** services like **Cloud front, Cloud Watch, RDS, S3, Route53, SNS, SQS, Cloud Trail, Elastic Beanstalk, Elastic cache and Code Deploy.**
* Experienced in automation process of building a docker file and pushing it into the container registry of the cloud platform using **groovy script** for Jenkins file.
* Experienced with the **RedHat OpenShift** container platform
* Hands-on experience in Deployment **with Chef, Ansible** towards **RDS** **AWS**, and **Terraform** for **building, updating, and versioning** infrastructure efficiently, and creating a custom in-house solution with **Chef or Ansible** configuration
* Installation, configuration, and management of VMWare vSphere 3 and 4 environments, Experience in implementing Continuous Integration (CI) and Continuous Deployment (CD) using **Jenkins** (CI/CD) tool to fully automate building pipeline, Lead the cloud infrastructure maintenance effort using a combination of **Jenkins**, **Chef**, and **Terraform** for automating the CICD pipeline in **AWS**.
* Worked on Complex Stored Procedures, Views, Triggers, Indexes, Functions in MS **SQL**.
* Developed **Python** and shell scripts for automation of the build and release process
* Experience in working with divergent technologies including IIS 8.0/8.5, Classic ASP, **VB.Net, ADO.Net**.
* Experienced in Setting up VPC’s and firewalls which comes automatically with default network access controls and allows all inbound and outbound IPv4 traffic and, if applicable, IPv6 traffic.

**Environment:** AWS, VMware, Windows 2008 and 2012 Servers, Sonarqube, GIT, Subversion, Nagios, GIT, MS build, Docker, RedHat OpenShift, Kubernetes, Chef, Ansible, Terraform, Ruby, vSphere, Jenkins, MS SQL, T-SQL, MYSQL Servers, MONGODB, Python, Java, Javadoc, shell, visual basic, Nginx, Apache, Tomcat.

**AWS DevOps Engineer**

**Autoliv. July 2016 – May 2017**

**Brigham City, Utah**

**Responsibilities:**

* Automated the cloud deployments using **Ansible**, **AWS** Cloud Formation Templates.
* Optimized volumes and EC2 instances. Used IAM to create new accounts, roles, and groups.
* Implemented **AWS** solutions using EC2, S3, **RDS**, EBS, Elastic Load Balancer, Auto scaling groups.
* Experienced in working on the application deployment, which involves some of the cloud services from google cloud platforms like, GCP compute engine, GCP app Engine, and storage bucket.
* Worked on automating things like creating the **Docker** images and pushing it to the google container registry using **Jenkins** file. Once the images got pushed into the container registry I used to work in building the pipeline for continuous integrations and Continues delivery (**CI-CD**), using the same **Docker** image address from GCR, I used to deploy it into the google **Kubernetes** cluster.
* Implemented and maintained the branching and build/release strategies utilizing **Subversion** /**GIT**. Responsible for design and maintenance of the **Subversion**/**GIT** Repositories, views, and the access control strategies
* Built and managed a large deployment of Red Hat Linux instances systems with **Chef** Automation and provision virtual **Servers** using vagrant and kitchen in Oracle VM virtual box, provisioned **Servers** in Amazon EC2.
* Created playbooks for deploying Linux and **Windows** on VMware vSphere, VMware guest modules in **Ansible**.
* Involved in installation, configuration, upgrading, patching, and administration of Linux, UNIX and **Windows** **Servers**.
* Experienced in evaluating application security tools for internal consumption.

**Environment:** ASP.NET, .Net Framework 4.0, C#, MVC Architecture and Web services, SharePoint, CSS 3 and SQL Server 2008, TFS, SQL Server Management Studio, AWS monitoring, IOT, Stream analytics, Data warehouse, GIT source control, Web Apps, Javascript, Active Directory.

**DevOps Engineer Feb 2014 – June 2016 Lexys**

**Hyderabad, India**

**Responsibilities:**

* Maintain and improve our **Continuous Integration/Continuous Delivery (CI/CD)** infrastructure and pipeline to quickly and accurately deliver software applications automatically.
* Maintain and improve our Continuous Integration/Continuous Delivery (CI/CD) infrastructure and pipeline to quickly and accurately deliver software applications automatically.
* Proficient in Ant, Shell, Ruby, **Python**, Gradle, and Perl Scripting.
* Proficient in developing Continuous Integration/ Delivery pipelines.
* Experience with automation/ integration tools like **Jenkins**.
* Automated build and deployment using **Jenkins** to reduce human error and speed up production processes.
* Managed **GIT**Hub repositories and permissions, including branching and tagging.
* Built and deployed **Docker** containers to break up the monolithic app into microservices, improving developer workflow, increasing scalability, and optimizing speed.
* Good experience in the infrastructure area related to deployments and troubleshooting.
* Familiarity with agile and waterfall systems development lifecycles (SDLC), i.e., SCRUM is desired.

**Environment:** Source control management, configuration management, DevOps Administration, ANT, shell, ruby, Python, Gradle, and Perl scripting, Jenkins, Puppet, Chef, Ansible, Docker, Kubernetes, Nagios.

**Linux System Admin May 2012 – Jan 2014**

**Tech Indya IT Services PVT. LTD**

**Hyderabad, India**

* Worked on Troubleshooting the Linux system, security-related issues, capturing packets using tools such as IP tables and Firewall Administration, package installation, package management, setting up repositories, applying patches using YUM and RPM
* Experience in Installation, Configuration, Backup, Recovery, Maintenance, Support of Red Hat Linux
* Setup secured password less Ssh authentication on **Servers** using Ssh keys and Schedule to maintain cron jobs.
* Experience in installing, configuring, supporting, and troubleshooting Unix/Linux Networking services and protocols like LDAP, DNS, NFS, DHCP, NAS, FTP, SSH.
* Managed systems routine backup, scheduling jobs like disabling, and enabling cron jobs, enabling system logging, network logging of **Servers** for maintenance, performance tuning, testing.
* Experience in Installing Firmware Upgrades, kernel patches, systems configuration, performance tuning on Linux systems
* Provided systems administration support for UNIX systems including server and workstation upgrades, backup and disaster recovery

**Environments:** IP tables and Firewall Administration, package installation, package management, setting up repositories, applying patches using YUM and RPM, Red hat Linux, Configuration, Backup, Recovery, Maintenance, Support of Red Hat Linux, cron jobs, Red hat.