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**Sai latha**

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**AWS/Azure Cloud Engineer/ DevOps Automation Engineer/ Build & Release Engineer/**

**Site Reliability Engineer**

**PROFESSIONAL SUMMARY:S**

* Over 8 years of Professional IT experience as a **Azure DevOps, AWS Cloud Engineer, DevOps Automation Engineer, Build& Release management**, and worked in many technical roles both in **Linux and Windows** environment for **build/Release automation** process in Web & **cloud/server** Environment using **Java/J2EE**Technologies, **Azure, AWS & open source** technologies.
* In-depth understanding of the principles and best practices with **Agile/Scrum/DevOps** software development methodologies.
* Experience in managing large scale cloud infrastructure, primarily on Openstack, AWS and Azure.
* Hands on experience in Provisioning Azure Cloud Services (PaaS & IaaS), Storage, Web Apps, Active Directory, Application Insights, and Logic Apps on Microsoft Azure classic and azure resource manager.
* Experience in configuring and deploying Azure Automation scripts for applications utilizing the Azure stack that including compute, blobs, ADF, Azure Data Lake, Azure Data Factory, Azure SQL, Cloud services and ARM and utilities focusing on Automation.
* Experience in designing, deploying and maintaining various multitude applications utilizing in AWS services stack including EC2, S3, EBS, EFS, Elastic Bean Stalk, Route 53, VPC, Cloud Front, Dynamo DB, RedShift, RDS, KMS, IAM, Kinesis, CloudFormation, ECS, ELB, SNS, SQS, focusing on high availability, fault-tolerance and auto scaling.
* Automated Infrastructure provisioning using the **Terraform, CloudFormation** and **ARM templates** as **Infrastructure as Code (IaC)**.
* Expertise in **designing** the **Infrastructure architecture** for new and existing production applications in distributed cloud environments.
* Experienced in installation, configuration, administration, troubleshooting, tuning, security, backup, recovery and upgrades of Linux and windows servers in large environment.
* Extensively worked on **Jenkins pipelines** for **continuous integration (CI)** & **continuous Delivery (CD)** and perform **End-to-End** automation for all build, test and deployments from scratch.
* Expertise in Configuring and using **Git**, **Bitbucket**, **Maven, ANT, Gradle, Jenkins, JFrog Artifactory, Ansible, Puppet, Chef, Terraform, Tomcat, Docker** and **Kubernetes**.
* Proficient with containerization technologies like **Docker** and container orchestration like **ECS**, **Kubernetes** and **OpenShift** for deployment, auto scaling and managing the Containerized application clusters.
* Written **fully automated build and deploy Jenkins pipeline scripts in groovy** from scratch for new projects and for new modules within existing projects achieving fully automation from code commit to Build & Deploy on the lower environments and after passing **E2E testing & Quality gates** automatically deploy to production servers.
* Experience with **Git** and **GitHub Enterprise** for Source Code Management System and knowledge on SVN, Bitbucket.
* Strong experience with deployment automation and virtualization tools. Strong preference for Hashicorp stack (Atlas/**Terraform,** Packer, Consul, etc)
* Worked on Harshicorp **Vault** secret management tool to provide security for credentials, tokens and API keys.
* Expertise in Enterprise repository management tools like **Nexus, jFrog, Artifactory** etc.
* Experience with **Ansible, Capistrano, Chef and Puppet** for configuration management.
* Experience with **AppDynamics,** Nagios, NewRelic, ELK, Grafana and Splunk for IT Infrastructure Monitoring and analytics tools, and knowledge on Zabbix and Dynatrace.
* Experience working with different **scripting** like UNIX **shell** scripting, **PowerShell, Yaml, Groovy, Python, Ruby** and passionate about learning new scripting languages on demand.
* Experience with High availability application Load balancing configurations and tuning **HAProxy** to handle very high loads.
* Experience in configuring **HTTPS** secure channels and Installing, managing and renewing **SSL Certificates**.
* Experience in Configuring Servers to provide Networking Services, including **HTTP/HTTPS, NFS, SMB, SMTP, SSH, NTP, TCP/IP, DNS, DHCP, and LDAP**.
* Experience in building advanced CI/CD workflows utilizing **Kubernetes/Serverless Framework,** including designing and building infrastructure, build/deployment automation, and QA Testing of workflows.
* Ensured, successful architecture and deployment of enterprise grade PaaS solutions using Private Cloud Foundry (PCF) as well as proper operation during initial Application migration and new development.
* Experience in Configuring and Deploying **JBoss, Apache Tomcat web server, IIS Server** and IBM **WebSphere** application servers.
* Experience working on installing and configuring Kafka Cluster with Zookeeper. Have knowledge on partition of Kafka messages and setting up the replication factors in Kafka Cluster.
* Experience in building performance testing suite using opensource tool **JMeter**.
* Experienced in Creating Clear and Concise Documentation.
* Strong oral and written communication skills, including presentation skills.

**Technical Skills:**

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| --- | --- |
| Operating Systems | RHEL/CentOS, Ubuntu/Debian/Fedora, Windows server 2012/2016/2019 |
| Languages and Scripting | YAML, Python, Ruby, Shell, Perl, HTML, Power shell, C, C++, Java |
| Database | MongoDB, Oracle DB, MySQL, AWS RDS |
| Infrastructure as a service | OpenStack, AWS, Azure, VMware, Terraform (IAC) |
| Containerization | Docker, Kubernetes, OpenShift |
| Configuration management | Ansible, Capistrano, Rundeck, Chef, Puppet, ansible tower |
| CI, Test & Build Systems | Jenkins Pipelines, Concourse, Maven, Gradle, Ant, |
| Application/Web Servers | Tomcat, JBoss, Apache, IBM WebSphere, IBM HTTP server |
| Logging & Monitoring Tools | Nagios, OP5, Splunk, AppDynamics, DataDog, Zabbix |
| Version Control Tools | GIT, SVN, Bitbucket |
| Security Tools | Dome9, Twistlock, Rapid7, Tripwire, Snort |

**PROFESSIONAL EXPERIENCE**

**Ally – Charlotte, NC** **March2019 – Present.**

*SRE /Cloud/DevOps Automation Cloud Engineer*

**Responsibilities:**

* Work with architects, developers, QA and cloud development team to implement cloud applications and automate processes to reduce toil using DevOps automation tools.
* Work on converting the traditional applications to docker and automate the build and deploy process for faster deployment and **reduced the deployment time by 80%.**
* Worked with various services of **AWS**: **EC2, ECS, ELB, Route53, S3, CloudFront, SNS, RDS, IAM, Lambda, CloudWatch, and Cloud Formation.**
* Worked on **OpenStack** services such as **Horizon, Keystone, Nova, Neutron, Glance, Cinder, Ceilometer and Swift**.
* Experience in Automating, Configuring and Deploying the Instances on **Azure environments** and in Data centers also designing ARM templates. Azure Resources like ASE, App Service Plan, App Services, Application Gateway, API Management, Event Hub, Azure Service Bus, App Insights, Key Vault, SQL Managed Instance, Storage Account, Virtual Machines, Subnets, Virtual Networks.
* Created a new Azure Active Directory (Azure AD) application and service principal that can be used with the role-based access control access to Azure Stack resources
* Using **Infrastructure as Code** tools Terraform, ARM templates and CloudFormation for provisioning the Cloud infrastructure.
* Developed and implemented Software Release Management strategies for various applications according to the **agile** process.
* Responsible for ensuring the reliability, scalability and high-grade security of highly available, by using cutting-edge open-source technologies.
* Use **Google’s SRE** (site reliability engineer) culture in maintaining the reliable infrastructure and following key elements **SLIs, SLOs, SLAs.** Perform **post-mortems** with teams after every roll back or deployment failure with precise documentation and constantly improving the process from previous failures. Following metrics of **MTTR** (Mean Time To Rollback, Respond, Resolve, Recovery), Mean Time To Mitigate, Mean Time To Acknowledge.
* Good understanding of **OpenShift** platform in managing **Docker** containers and **Kubernetes** Clusters.
* Work on breaking up the monolithic applications to microservice and using **Jenkins pipelines** deploy the microservices applications to **Docker registry** and then to **Kubernetes**.
* Authored **Terraform modules** for infrastructure management and published module to the Terraform registry to deploy production cloud environment.
* Using **Power shell** to write, debug scripts to automate the processes and do migration of VM, involving copying and creating of VHDS. Configuration of Microsoft DevTest Labs to migrate the virtual machines from one subscription to another subscription.
* Built a VPC, established the site-to-site VPN connection between Datacentre & AWS**.**
* Used **Dome9** to detect misconfigurations, model and actively enforce security best practices, and protect against identity theft and data loss in the cloud.
* Worked with Hashi corp **vault** to store the credentials. Integrated with CI/CD pipeline to manage the credentials for build and deployment jobs.
* Used **tripwire and snort** intrusion detection system (IDS) and configure email alerts on production Servers for security to detect and protect from the outside threats.
* Utilize cloud-based APIs when appropriate to write network/system level tools for **securing cloud** environments.
* Written **Docker files** to package and build docker containers. Used **Multistage docker** files to build maven code in one container and deploy and test on another container.
* Deploy Java microservice applications Using **Docker containers, Kubernetes** and**OpenShift.** configuring autoscaling, replica sets etc using Yaml files.
* Work on implementing the Docker using the docker maven plugin for wrapping up final code by building Docker images, setting up development and testing environment using Docker Hub, Docker Compose, Docker Swarm and Docker Container Network.
* Worked with **Twistlock** to perform scans for docker container and check vulnerabilities.
* Work on writing automation scripts using **shell** scripting, **PowerShell, Yaml, Groovy, Python, Ruby** using **IntelliJ.**
* Used RPM maven plugin to package springboot java application JARs with dependencies and convert to RPM for easy deploy on servers.
* Experience with **Ansible, Capistrano, Chef** and **Puppet** for configuration management.
* Developed **Ansible playbooks,** inventories and custom playbooks in **YAML** and encrypted the secrets using **Ansible Vault** and maintained role-based access control by using **Ansible Tower.** Implemented **IT orchestration** using **Ansible** to run tasks on different servers.Used **vault** for managing the secrets.
* Work on Setting up CI tool **Jenkins master slave cluster** from the scratch with high availability and configure plugins, settings and Single sign on (**SSO**)for authentication with matrix.
* Used **Git** as source code management tool: creating local repo, cloning the repo, adding, committing, pushing the changes in the local repo, saving changes for later (Stash), recovering files, cherry-pick, branching, creating tags, viewing logs, etc. and responsible for **Access management** for **GitHub enterprise** Organizations.
* Configured **AppDynamics** Application Performance Monitoring (**APM**) with java applications to perform deep dive analysis and monitor the trends and trigger email notifications. Created AppD application Dashboards.
* Used **Op5, DataDog** for monitoring infrastructure, **Splunk** for log analytics and created dashboards to check Application call volumes, errors, response times and alert if below threshold and daily reports for all applications. Used ansible to push splunk forwarders configurations on large scale servers.
* Hands on experience on Installing and configuring Elasticsearch Logstash Kibana (**ELK**) **Stack** using docker and created dashboards on Kibana.
* Building Jenkins groovy **pipeline** scripts to Integrated services like **GitHub, Nexus repository**, deploy on QA environment and perform E2E tests and after passing tests and quality gates continuously deploy the new build on higher environments.
* Worked on configuring **WordPress** application on **LAMP** stack for publishing the application documentation and platform for users’ feedback and interaction.
* Worked on configure and managing **Motomo** for **web analytics** used **Fabric** for Realtime **analytics** and event tracking for **IOS** mobile application.
* Configured and used **mountebank** and **Hoverfly** tools for API response mocking for Application testing.
* Involve in performing the **chaos testing** applications to test the resilience of applications IT infrastructure.
* Experience working on installing and configuring Kafka Cluster with Zookeeper and Redis.
* Development of offering proofs-of-concept for cloud platform and effectively transition those concepts to the lines of business for engineering and deployment.
* Used **JIRA** and **ServiceNow** as a Change Management/ Work Management/ SCRUM Agile Tool.
* Involved in troubleshooting business critical issues and finding Root Cause Analysis by analysing **heap/thread dumps** and network packets taking **tcp dump**, snoop using **Wireshark**.
* Use Web **Browser** developer tools for **troubleshooting** the application and network issues and analysing the network calls and response headers.
* Install and configure **MongoDB** clusters using replica sets and sharding clusters for High performance applications. Used **RoboMongo** for query and update document data in MongoDB cluster. Used Oracle and opensource SQL DBs like MySQL, Postgres, MariaDB.
* Deployed web and enterprise applications (war, ear) on **Tomcat Application Servers, windows IIS**: the deployment environment included **Linux, Windows.**
* Good knowledge on google cloud platform (**GCP)** services like compute engine, cloud load balancing, cloud storage, cloud SQL, stack driver monitoring and cloud deployment manager.
* Good knowledge on Setup **GCP** Firewall rules to allow or deny traffic to and from the VM's instances based on specified configuration and used GCP cloud CDN (content delivery network).
* Work on Installing and managing the **SSL certificates** to make the applications communication channel secure with **HTTPS**. Wrote script to automatically check the expiry date and send email alerts.
* Use **HAProxy and Nginx** as Software application Load balancer and expertise in fine tuning configurations to improve the performance and reliability in handling the heavy traffic loads.
* Perform server updates, patching, upgrades and package installations.
* Performed NetBackup and Recovery, maintained regular backups using tar, ufsdump, ufsrestore, snapshot, etc.
* Written **Python** and **Bash scripts** for system administration and automation such as automate the regular tasks like removing core files, taking backups of important files, file transfers among servers, etc.
* Configured resources such as packages, services, files, directories, exec, notify, users, groups, cron jobs, etc. using **Ansible.**
* Involved in troubleshooting issues related to applications, and systems. Lead troubleshooting calls and perform Root Cause Analysis (**RCA**) for the issue and maintained **KEKB** to avoid same issues in future.
* Provide **24x7 on call** production support for application and cloud infrastructure.

**Environment:** AWS (IAM, EC2, ECS, ECR, ELB, S3, EBS, Kinesis, VPC, Route53, RDS, DynamoDB, SQS, SNS, Lambda, Cloud formation) Openstack, Azure, Linux, Windows, Terraform, Kubernetes, Docker, OpenShift, Ansible, Capistrano, Chef, Git, Jenkins Pipelines, vault, JBOSS Maven, Nexus, JFrog Artifactory, Splunk, Op5, AppDynamics, Datadog, Yaml, Groovy, Python, Java, Kafka, Redis, SonarQube, Tripwire, MongoDB, OracleDB, GCP.

**Comcast – Philadelphia, PA Jan 2018- March2019**

*SRE/Cloud Engineer*

**Responsibilities:**

* Experienced with build and release management, configuration management, DevOps, and Infrastructure management using automation tools.
* Involved in supporting cloud instances running Linux and Windows on AWS, experience with Elastic IP, Security Groups and Virtual Private Cloud in AWS.
* Design & implemented VPC service for extension of customer's on-premises datacenter with AWS cloud using AWS VPC and VPN & Direct connect services.
* Developed Scripts for AWS Orchestration and designed new back-end services, maintaining and expanding our AWS infrastructure, and providing mentorship to others on my team.
* Used Terraform to create, change and improve production infrastructure and maintained versioning infrastructure safely and efficiently by custom in-house solutions.
* Managing major architecture changes from single server system to a distributed system with Docker and Kubernetes orchestration.
* Used Kubernetes for automating deployment, scaling and operations of applications containers across clusters of hosts, providing container centric infrastructure.
* Provided a consistent environment using Kubernetes for deployment scaling and load balancing the application from dev through QA, easing the code development and deployment pipeline by containerizing traditional applications.
* Created Docker Containers, Docker file, Docker Images, Docker Network, Docker Orchestration, Docker Swarm, Containers Clusters, Google Container Registry, Multi-Containers, Replication Controllers, Services, Pods, Endpoints, Rollbacks.
* Installed and configured Jenkins and created master and slave nodes for handling multiple builds installing plug-in wherever required for the implementation of those builds.
* Configured Jenkins pipeline for auto deployment through continuous integration (Jar build, AMI creation, Integration test, contract test, performance test, deploy in Test environment and then into Production) .
* Implemented continuous deployment system with Jenkins, AWS Code Deploy plugin to deploy and Ops Works, and Packer for deployment of Java Applications.
* Developed build and Deployment Scripts using MAVEN as build tool in Jenkins to move from one environment to other environments.
* Assisted developers with establishing and applying appropriate branching, labelling/naming conventions using GIT source control, analyzed and resolved conflicts related to merging of source code in GIT.
* Worked with Ansible playbooks for virtual and physical instance provisioning, configuration management, patching and software deployment on AWS environments.
* Installed configured Managed Monitoring tools, such as AppDynamics, Splunk, Nagios for Resource Monitoring/Network Monitoring/log Trace Monitoring
* Work on Docker container snapshots, attaching to a running container, removing images, managing directories structure and managing containers.
* Worked on creating the POCs on the Kubernetes container orchestration. Created the K8s clusters and deployments for web applications using the Jenkins pipelines with autoscaling.
* Build the deliverable artifacts using Maven as a build tool in Jenkins for Java applications and deploy them to various environments. Built and deployed EAR and WAR artifacts with custom configuration settings using Maven Tool Kit and further deployed the artifacts into Apache Tomcat Web Server and WebSphere Application Servers.
* Installed Jenkins on Linux machines, created master, and slave configurations to run multiple builds in parallel and run platform specific application jobs on windows Slave nodes for Extensive E2E testing.
* Wrote Jenkins Groovy pipeline scripts for automating the build and deploy tasks increasing the efficiency.
* Worked with Ansible playbooks for orchestration, provisioning, configuration management and application deployment in multiple environments. Experienced working with Ansible tower and rundeck to create projects and scheduling jobs.
* Created and wrote shell scripts (Bash), YAML, Groovy, Ruby, Python and PowerShell for automating tasks.
* Work in monitoring Cloud servers using op5 Nagios, Cloud watch. Creating dashboards and alerts. Automated Nagios services for database server, HTTP webserver, application-server, networks, file sizes, RAM utilization, Disk performances using python and Ansible.
* Used MySQL, Dynamo DB and Elastic cache to perform basic database administration.
* Analysed Heap dumps for memory leaks in applications using IBM Heap Analyzer across different environments.
* Used TestNG and Selenium WebDriver for Automation testing for the application and component testing and Apache JMeter for load/performance testing CRDB.

**Environment:** AWS, Linux, Windows, Chef, Java, Git, Ant, Maven, Jenkins, Nexus, Ansible, Terraform, Rest API, Docker, Kubernetes, PCF, MySQL, Selenium, Jira, Groovy, Python, Ruby, Shell Scripts, Tomcat, IBMWebsphere, Nagios.

**UHG-Boston MA**  **Feb2016– Dec2017**

*DevOps Engineer*

**Responsibilities:**

* Design roles and groups using AWS Identity and Access Management (IAM).
* Building & configuring Red Hat Linux systems over the network, implementing automated tasks through crontab, resolving tickets according to the priority basis.
* Managed hardware, software and networking for a large scale cluster on Amazon EC2.
* Designed and deployed AWS solutions using EC2, S3, RDS, EBS, Elastic Load Balancer, Auto scaling groups, Ops works
* Implemented a GIT mirror for SVN repository, which enables users to use both GIT and SVN.
* Maintained build related scripts developed in ANT, Python and Shell. Modified build configuration files including Ant's build.xml.
* Used Maven for doing Java build involving over 5000 JAR files and 2-week build schedule.
* Created Clear Case configuration record for builds using derived objects generated during build audit process
* Good knowledge on Dynamo DB and Amazon EMR.
* Implementing a Continuous Delivery framework using Jenkins, CHEF, Maven & Nexus as tools
* Creating CHEF recipes for a Proof of Concept.
* Installed and Managed Nexus Private repository manager for handling dependency management.
* Used JIRA tool to track all the defects and changes related to build and Release Team.
* System monitoring with Nagios & Graphite.
* Deploying Java Enterprise applications to Apache Web Server, JBoss Application Server Highly skilled in the usage of data center automation and configuration management tool such as Docker.
* Worked with the Architects on SDLC process being the owner of post development environments.
* Business data analysis using Big Data tools like Splunk, ELK.
* Installed and configured MySQL and oracle database on Linux servers.
* Initial troubleshooting and resolution of network connectivity issues. Experience in documenting processes and procedures followed in fulfilling a task.
* Maintain the build process to support ongoing R&D.

**Environment:** Linux, Java, maven, Git, Python, Apache Web Server, JBoss, CHEF, JIRA & Nexus**,** UNIX & Perl scripts, Nagios, Docker, AWS

**Green Chain Software Solutions,- HYD Aug2012 –Nov2015**  *Build & Release Engineer*

**Responsibilities:**

* Managed releases, Environment Management, Deployments, Continuous integration, Continuous deployment, Incident management, Version management.
* Installed configured upgraded software packages for Linux and Solaris Servers using RHN, and sun update manager.
* Analysed and monitored resource utilization, and system performance using various system tools such as vmstat, sar etc.
* Wrote shell scripts for monitoring the systems and applications such as monitoring the processes in all the servers, and also run cron jobs using crontab.
* Managed volume and file system using ZFS on Solaris and LVM in Linux.
* Installed and configured Apache Web server, WebLogic Application Server, and Oracle database in the servers.
* Configured domains, admin and managed servers in WebLogic application server to deploy web/enterprise applications.
* Ability to handle load balancer implementations like bonding multiple interfaces into single bond in case of over load on LAN devices.
* Strong understanding in writing the automation of processes using the shell script with bash
* Administering local and remote servers on daily basis, troubleshooting and correcting errors.
* Continuous Integration and Continuous deployment also used Build automation tools like Jenkins, Ant, Maven.
* Experience in using MAVEN and ANT for building of deployable artifacts (jar, war & ear) from source code.
* Creating builds using shell Scripts, ANT/Maven scripts manually and automated. Also worked on design and maintenance of the GIT Repositories

**Environment:** CentOS & Ubuntu, Solaris 9/10/11, VMware, Java/J2ee, GIT, ANT, Maven, Nexus, Jenkins, Python, Apache Tomcat, KickStart, WebSphere, SQL, Agile, UNIX & Perl scripts, Jira, Shell scripts, Apache, Bash, JBoss Application Server, Subversion

**CERTIFICATION:** AWS Certified solution Architect- Associate **AWS01669014**

**Education Details:**  Bachelor’s in Information Technology from JNTU- HYD 2012