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| ***MAMATHA REDDY Sr. DevOps AWS Engineer*** | [mamatha.awsdevops@gmail.com](mailto:mamatha.awsdevops@gmail.com) ***Contact: (678) 632-6709*** |

**PROFESSIONAL SUMMARY:**

Over 7+ years of experience in IT industry with imperative concentration on cloud **designing and management, DevOps**, automation, Linux administrator, build and release Management.

* Experienced in managing applications by implementing AWS services which includes **EC2, S3, EBS, VPC, ELB (Elastic Load Balancing), AMI, SNS, RDS, IAM (Identity &Access Management), KMS(Key Management Service) Route 53, Auto scaling, Cloud Front, Cloud Watch, Cloud Trail, Cloud Formation, OPS Work, Security Groups.**
* Working AWS provisioning EC2 Infrastructure**, VPC setup, Auto Scaling** for availability of EC2 Instances and availability of applications and deploying applications in **Elastic load balancing**.
* 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.**
* Experienced in using **AWS** elastic bean stack as Platform as a service(**PaaS**) to manage the AWS cloud environment.
* Troubleshoot any build issue with **ELK (Elasticsearch, Log stash, Kibana)** and work towards the solution.
* Deployed **Azure** **IaaS** virtual machines (VMs) and Cloud services (PaaS role instances) into secure VNets and subnets.
* Experienced in branching, merging, tagging and maintaining the version across the environments using SCM tools like Git and Subversion (SVN) on Linux platforms.
* Implemented multiple **CI/CD** pipelines as part of DevOps role for on-premises and cloud-based software using **Jenkins/Bamboo, Nexus, Chef and AWS/Docker and Kubernetes.**
* Extensive experience using **MAVEN** and **ANT** as build tools for the building of deployable artifacts (**jar, war & ear**) from source code.
* Proficient with **Shell, Python, Ruby, Perl, Power Shell, JSON, YAML, Groovy** Scripting languages with the concepts of **Azure** and **Open Stack** Cloud based technologies.
* Creation of Keystone, Nova, Glance, Swift, Neutron, Cinder, Heat, Ceilometer, Trove, Horizon Dashboard for Open Stack IAAS environment for agile projects.
* Administered Red Hat Enterprise Linux which includes installation, upgrading and loading patches on **VMware** virtualization systems
* Strong understanding of infrastructure automation tools (Terraform, **Cloud Formation Templates**).
* Experience in handling **Ansible** to manage AWS environments and automate the build process for core AMIs used by all application deployments including **Auto scaling** and Cloud Formation scripts.
* Automated deployment activities in middleware environment which includes portal applications running on Java/AWS using **Puppet master** and **Agent nodes** and Integrated Puppet with **Apache** and Passenger.
* Implemented Chef recipes for deployment of builds on internal data center servers. Modified and re-used old Chef recipes to create a deployment directly into Amazon EC2 instances.
* Experience working on several **Docker** components like **Docker** Engine, creating Docker images, Compose. Docker Registry and handling multiple images for middleware installations and domain configuration.
* Ability in deploying the developed code in a WebSphere/WebLogic/Apache **Tomcat**/JBOSS.
* Integrated Unit Tests and Code Quality Analysis Tools like **JUnit**.
* Experienced in setting up the network monitoring tools like **Nagios** and **Amazon Cloud watch** to monitor major metrics like CPU utilization, Network packets and Load balancer latency.
* Experience in installing, configuring, supporting and troubleshooting Unix/Linux Networking services and protocols
* like NIS, LDAP, DNS, NFS, DHCP, NAS, FTP, and SSH.
* Experienced in building **REST APIs** on **SQL, Oracle** (Relational) and **NoSQL** databases like **MySQL, MongoDB** and **EMR.**
* Worked with different bug tracking tools like **JIRA**, **HP Quality center**, **Clear Quest**.

***TECHNICAL SKILLS*:**

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| **Version Controls** | SVN, GIT, GitHub, ClearCase, Jenkins CI, Code Collaborator |
| **Configuration management** | Chef, Puppet, Ansible, Salt Stack |
| **CI and Build Tools** | Jenkins, Hudson, Bamboo |
| **Virtualization Platforms** | Virtual Box, Vagrant, VMware |
| **AWS/Databases** | Oracle, Mongo DB, MySQL, RDS, NoSQL |
| **Application Servers** | Oracle, Apache Tomcat, WebLogic, WebSphere, JBoss, Tomcat, IIS |
| **Scripting Languages** | Bash, Perl, Ruby, Shell, Python, HTML |
| **Build Tools** | Maven, Ant |
| **Cloud platforms** | AWS, Azure, Rackspace, Open stack, Kubernetes |
| **Logging & Monitoring Tools** | Splunk, Log stash, Nagios |
| **Programming Languages** | C/C++, Java/J2EE, C#. |
| **Amazon Web Services** | EC2, Elastic Load Balancer, Auto Scaling Services, Glacier, Elastic beanstalk, Cloud Front, Relational Database, Dynamo DB, Virtual Private Cloud, Route 53, Cloud Watch, Identity and Access Management(IAM), EMR, SNS, SQS, Cloud Formation, Lambda. VPN |
| **Networking** | LDAP, DNS, FTP, DHCP ,SSH, TCP/IP,NFS, SMTP, SOAP, HTTP/HTTPS |
| **Issue Tracking Tools** | Jira, Remedy, Clear Quest |

**WORK EXPERIENCE**

**Sr. DevOps/AWS Engineer**

**Point72 Asset Management, CT Aug2016- till date**

**Responsibilities:**

* Designed, configured and deployed **Amazon Web Services (AWS)** for a multitude of applications using the AWS stack (**EC2, Route53, S3, RDS, Cloud Formation, Cloud Watch, SQS, IAM**), focusing on high-availability, fault tolerance, and auto-scaling.
* Build and configured a virtual data center in the Amazon Web Services cloud to support Enterprise Data Warehouse hosting including Virtual Private Cloud (**VPC**),internet gateway’s, Public and Private Subnets, Route Tables, Elastic Load Balancer(**ELB**).
* Migrating an on-premises application to cloud.
* Accomplished and maintained the monitoring and alerting of production and corporate servers/storage using **Cloud Watch.**
* Wrote **AWS Lambda** functions in python for AWS's Lambda which invokes **python** scripts to perform various transformations and analytics on large data sets in EMR clusters.
* 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.**
* Utilize **AWS CLI** to automate backups of ephemeral data-stores to S3 buckets, EBS and create nightly AMI's for mission critical production servers as backups.
* Created and managed **Azure AD** tenants and configured applications with Azure AD and Integrated on-premises Windows AD with Azure AD.
* Designed data pipelines for loading network data in **Elastic search** for consumption with **Kibana dashboard** and graphs.
* Implemented rapid-provisioning and life-cycle management for Linux using **Amazon EC2, Chef**, and custom **Ruby/Bash, python scripts.**
* Configured **Jenkins** as a common build engine to build and deploy applications to DEV, QA, and UAT and PROD environments also Integrated **Jenkins** with **uDeploy**and Created **uDeploy** Components, **uDeploy** process, installed **uDeploy** agents on both windows and **Linux** machines according to application team requirements.
* Extensive experience using **MAVEN** and **ANT** as build tools for the building of deployable artifacts (jar, war & ear) from source code.
* implemented **CI/CD for all the Microservices of the OEM application using Jenkins, Maven**.
* Wrote Ansible Playbooks with Python SSH as the wrapper to manage the configuration of AWS nodes and test playbooks on AWS instance using Python. Ran Ansible scripts to provision Dev Servers. Created Post Commit and pre-push hooks using Python in **SVN** and **GIT** repositories.
* worked on **Chef/**Ansible as Configuration management tool, to automate repetitive tasks, quickly deploys critical applications, and proactively manage changes and Written **chef** recipes to perform middleware binary Installation and Configuration tasks involving JDK, Tomcat binaries installation.
* Worked with **Agile development** team to develop continuous integration/continuous delivery in the delivery of product in an open source environment using tools such as Jenkins, Chef.
* Focused on containerization and immutable infrastructure, **Docker** has been key to this experience, along with Mesos, Marathon and Kubernetes.
* Used **Puppet** to deploy **ELK** for automating CD and configured Slave Nodes and deployment failure reporting.
* structured and maintained assigned virtual servers. Monitored server traffic through Nagios. Administered web servers on **Apache** and **Nginx.**
* Creating the file systems using **red hat** volume manager and performing the health check on regular basis for all Linux serves.
* Used **JIRA** for ticket tracking, change management and **Agile/SCRUM** tool.

**Environment:** Chef, Jenkins, AWS, GIT, Docker, Ansible, Bash scripts, SVN, Tomcat, Nexus and Kubernetes, AWS EC2, Jenkins CI, Elastic Load Balancing, Elastic Bean Stalk, Elastic Container Service, ECS, Cloud Front, Cloud Formation, Elastic Cache, Cloud Watch, Route 53, Redshift, Lambda and DynamoDB, GIT.

**Sr. AWS/DevOps Engineer**

**Solar Turbines, San Diego, CA Aug2015 - Jul2016**

**Responsibilities:**

* Demonstrated competency with the following **AWS** services: **EC2, EBS, S3, RDS, VPC, Route53, ELB, IAM, Cloud Front**, Cloud Formation and Ability to make recommendations on how new **AWS** offerings fit in the company architecture
* Created and managed Unified platform for location intelligent communication based build and release processes on using **Git, Bitbucket and Jenkins** on **AWS** Cloud Infrastructure Systems.
* Managed **AWS EC2 instances utilizing Auto Scaling, Elastic Load Balancing and Glacier** for our QA and UAT environments as well as infrastructure servers for GIT and Ansible.
* Creating EC2 instances in secured private subnet and deploying them in load balancing, assigning Elastic IP Addresses for **EC2 instances.**
* Worked on functions in **Lambda** that aggregates the data from incoming events, then stored result data in **Amazon Dynamo DB**. This function also sends data to Amazon **Cloud Watch** for simple monitoring of metrics.
* Experience in creating alarms and notifications for **EC2 instances** using **Cloud Watch**.
* Implemented multi-tier application provisioning in AWS cloud, integrating it with **Chef/Puppet.**
* Launched and configured the **Amazon EC2** Cloud servers using **Linux AMI** and **Ubuntu AMI** and configuring the servers for specified applications using **Jenkins**.
* Build a CI/CD pipeline to automate the process using the **python** script.
* Wrote the **Vagrant** scripts to spin up servers on the developer work stations.
* Created **GIT** repositories and specified branching strategies that best fitted the needs for the client.
* Worked with built-in Groovy scripting console for creating **groovy scripts** in Jenkins.
* **Implemented Elastic search, Log stash and Kibana for the Sales and Audit application**.
* Used **Terraform** scripts to Automate instances for Manual instances that were launched before.
* Wrote and used **Puppet** Modules to deploy applications on production environment and related configuration to ensure they get to production on time.
* Written **Ant** Scripts for Automating ear deployments and configuration of Web Sphere server for all J2EE applications.
* Maintains a git repository for our puppet modules and **ansible playbooks**.
* Achieved Continuous Delivery in high scalable environment by **Docker** coupled with load balancing tool **Nginx.**
* Writing **json** templates for cloud formation and ruby scripts for **chef** automation and contributing to our repository on **GitHub** (sub version control).
* Experience working on User admin groups, maintaining account and monitoring system performance using **Nagios**.
* **Written Chef Cookbooks** in ruby scripting for various DB configurations to modularize and optimize end product configuration.
* Setting up scalability for application servers using command line interface(CLI) for Setting up and administering DNS system in **AWS** using **Route53** Managing users and groups using the amazon identity and access management (IAM).
* Installed, configured and maintained web servers like **HTTP Web Server**, **Apache Web Server** and **Web Sphere Application Server** on Red Hat Linux.

**Environment:** EC2, S3, EBS, Elastic Load Balancer (ELB), Auto Scaling Groups, Git, Jenkins, Maven, AWS, Web Sphere, PHP, Apache Tomcat, J Boss, Puppet, Nagios, Cloud Watch, Groovy Script,HTTP Web Server, Apache Web Server, Vagrant, Route53, chef, Terraform, Kibana, Long stash, Elastic Search.

**Role: Cloud Engineer**

**Ford Motor Company, MI Mar 2014 - Jul 2015**

**Responsibilities:**

* Implemented AWS solutions using **EC2, S3, RDS, EBS**, Elastic Load Balancer, Auto scaling groups, Optimized volumes and EC2 instances.
* Continuous Integration of builds using Jenkins's, Migration of build system Ant to Maven and managing the build system Worked on Managing the Private Cloud Environment using Chef.
* Developed build using **ANT** and **MAVEN** as build tools and used CI tools to kick off the builds move from one environment to other environments.
* Written scripts in Python to automate log rotation of multiple logs from web servers.
* Hands on compiling builds using **pom.xml** and **build.xml**.
* Used **Jenkins**, Build forge for Continuous Integration and deployment into Tomcat Application Server.
* Implemented the setup for Master slave architecture to improve the Performance of **Jenkins**.
* Deployed an Azure instance for a hybrid based authorization and encryption system.
* Maintained and Administered **GIT** Source Code Tool.
* Integrated **maven** with **GIT** to manage and deploy project related tags.
* Managed the **Subversion** branching strategy for a few applications by creating Release branches, Development branches thus ensuring the integrity of Trunk.
* Implemented GIT mirror for SVN repository, which enables users to use both GIT and SVN.
* Merging release branches back to trunk after the production release and resolving of conflicts during merging in both **CVS** and **Subversion.**
* Involved in the migration of code from SVN to GIT.
* Configured Nagios to monitor **EC2** Linux instances with Chef Automation.
* Supported the process of first time configuration of web applications using Vagrant along with **Puppet and Chef for provisioning.**
* Established **Chef** Best practices approaches to system deployment with tools with vagrant and managing Chef Cookbook as a unit of software deployment and independently version control.
* Managed and reviewed the **HBase** log files.
* Incorporated the development of **SOAP** and **RESTFUL** web services.
* Deployed application packages on to the **Apache Tomcat server**. Coordinated with software development teams and **QA** teams.
* Deployed the build artifacts into environments like **QA, UAT** according to the build life cycle.
* Involved partially in deploying WARs/EARs (backend) through **WebLogic** Application Server console.
* Capable of installing, configuring and monitoring tools such as **Nagios** for resource monitoring and Log trace monitoring.

**Environment:** ANT, MAVEN, Apache & Tomcat, shell & Perl scripting, Subversion, Jenkins, Hudson, Windows 2000/XP, LINUX, UNIX GIT, GITHUB, Chef, Azure, SOAP web service, RESTFUL web service, Nagios.

**Role: DevOps Engineer**

**Tufts Health Plan, MA Aug2013-March2014**

* Participated in the release cycle of the product which involved environments like Development, SIT, QA, UAT and Production.
* Extensively used **ANT** tool to do the builds, integrated **ANT** to Eclipse and did local builds.
* Managed **Maven** project dependencies by creating parent-child relationships between projects.
* Worked with Knife command-line tool and creating **Chef Cookbook**.
* Built and configured the work environments using **Chef** on both, the cloud and on-premise data centers
* Using **Chef** automated the deployment workflow of JAVA applications on **Apache Tomcat** and **Oracle WebLogic** servers
* Configured Knife to manage chef-server, spin-up new instances, package installs and configuration changes on client nodes.
* Created custom developer tools and workflows for testing and releasing **Puppet** code
* Developed POC on **Chef,** **Jenkins**, **Sonarqube** to determine a promising product or service.
* Developed Cookbooks, Recipes, Resources and Run lists, managing the **Chef** Client nodes, and upload the cookbooks to chef-server from Workstation.
* Responsible for creating New Branches, Rebasing and Re-integrating branches.
* Automated legacy infrastructure in the interim while working through **Chef**.
* Automated the process of deployment to **Apache Tomcat** application servers by developing **Perl** Scripts.
* Responsible for design and maintenance of the **GIT Repositories** and the access control strategies.
* Worked on Amazon cloud POC (AWS installation of open stack and Image)
* Experience in managing Source control systems **GIT** and **SVN**.
* Performed necessary day to day **Subversion/GIT** support for different projects.
* Creation of branches in **CVS and Subversion** for parallel development process.
* Managed **Jenkins** and **Bamboo** as a CI server for different projects.
* Worked in **Agile** Project management Process.
* Built and Deployed Java/J2EE to Tomcat Application servers in an agile continuous integration process and automated the whole process.
* Continuous Integration of builds using **Jenkins's**, Migration of build system Ant to Maven and managing the build system.

**Environment:** Java/J2ee, GIT, ANT Maven, Nexus, Tomcat, open stack, UNIX & Perl scripts, Jira, Shell scripts, Jenkins, Python, Find bugs, check style, Bamboo, Subversion, CVS.

**Charter Communications, Maryland Heights, MO. Aug 2012 – July 2013 Software Configuration Engineer**

**Responsibilities:**

* Implemented rapid-provisioning and life-cycle management for Linux using Amazon EC2, Chef, and custom **Ruby/Bash scripts.**
* Created scripts in Python which integrated with Amazon **API** to control instance operations.
* Utilized **Bamboo** for the integration of build dependencies and configuration of jobs.
* Used **Nagios** to extensively monitor the environment using SNMP, NRPE and VMware ESxi protocols.
* Expanded Experience in Network Management like **DNS, NIS, NFS, LDAP, FTP** and system troubleshooting skills.
* Experienced in branching, tagging and maintaining the version across the environments using SCM tool like **GIT**.
* Supervised the configuration of **Subversion (SVN)** which is distributed for multiple applications.
* Built and deployed J2EE application in **JBoss** in an **agile** continuous integration environment using **Python** scripts
* Experience is utilizing Tomcat, servers for arrangements. Experienced in organization of uses **on Apache Web server, JBOSS, WebLogic** **and WebSphere Applicatio**n.
* Installation and configuration of JBoss, Web Sphere 5.1/6.0 Application Server on Solaris and Linux boxes.
* Written cookbooks for Web Logic, JDK 1.7, and Jenkins, tomcat, JBoss and deployment automation
* Build scripts using **ANT** and **MAVEN** build tools in Jenkins to move from one environment to other environments
* Improved the installation and configuration on **UBuntu**, **Red hat**.
* Configured **Jenkins to implement nightly builds on daily basis and generated change log that includes changes happened from last 24 hours.**
* Responsible for User Management, Plugin Management and End-to-End automation of **Build** and **Deployment** process using **Jenkins**.
* Gained experience in installation, configuration, up gradation and patching on **RHEL 5.X** and windows in **EC2 i**nstances.
* Supported the process of first time configuration of web applications using Vagrant along with **Puppet for provisioning.**

**Environment**: GIT, Bamboo, LDAP, SCM, Red Hat Enterprise Linux, Puppet, JBOSS, Jenkins, Python scripting, Nagios, Chef.

**Virtusa Polaris, India Aug 2011 – Jul2012  
Role: Release/Build Engineer**

**Responsibilities:**

* Developed and supported the software Release Management and procedures.
* Created and maintained **Subversion/GIT** repositories, branches and tags.
* Used **SVN** as Version control for versioning code and configurations
* Performed all necessary day-to-day **GIT** support for different projects.
* Implemented & Maintained the Branching and Build/Release strategies utilizing **GIT** source code management.
* Worked on Administration, maintenance and support of **Red Hat Enterprise Linux (RHEL) Servers.**
* Used **Ant** and **Maven** as a build tools on java projects for the development of build Artifacts on the source code.
* Manage deployment automation using **Puppet, Custom Puppet** Modules and **Ruby**.
* Setup and Install **Chef** workstation, **Chef** Server and bootstrapping the Chef Clients using knife.
* Creating new build jobs, Integration testing jobs and deploy jobs in **Jenkins** to automate the process
* Involved in Chef-infra maintenance including backup/monitoring/security fix and on **Chef** Server backups.
* Developed installer scripts using **Ant**, **Python** and **UNIX** for various products to be hosted on Application Servers.
* Automated the build and release management process including monitoring changes between releases
* Configure, implement, and automate Continuous Delivery pipelines for software delivery teams utilizing the supported **CI tools**.
* Installed Git, GitHub plug-ins in Jenkins, thus automating the CI process. Worked with the groovy scripts in Jenkins to execute jobs for a continuous integration pipeline where **'Groovy Jenkins Plugin'** and **'Groovy Post Build Action Plugin'** is used as a build step and post build actions.
* Delivered architecture designs and solutions for public, private and hybrid clouds covering the cloud architecture tiers and portfolios of cloud services.
* Developed **Python code** to extract information from XML files using DOM Modules.
* Written Scripts for continuous delivery tools with their scripting API’s using Bean shell and shell, in order to Automate Complex Processes.
* Experience in writing Maven pom.xml and Ant build.xml for build scripts.
* Executed user administration and maintenance tasks including creating **users** and **groups**.
* Responsible for User Management, Administration, Group Management, Slave Management, new job setup in **Jenkins**.

**Environment**: Red Hat Enterprise Linux 5.4, GIT, ANT, Jenkins, Maven, Apache Tomcat, Shell, Puppet, Nexus, AWS, EC2, Jira, Python, Docker.

**Noha Solutions, India, Aug 2009- Jul 2011**

**Role: Linux System Administrator**

**Responsibilities:**

* Installation and customization of Sun Solaris and **Red hat Linux** Enterprise Server 5 servers.
* Configuring network services such as **DNS/NFS/NIS/NTP for UNIX/Linux Servers**.
* Worked with Apache and developed several **UNIX** scripts to automate web tasks.
* Configured firewall based on **Red hat Linux** and **FreeBSD** that has three network interfaces.
* Backup management and recovery policy using **Veritas Net Backup** (VNB)
* Installed **EXSI hypervisor** for **VMware** created for new **Centos** servers.
* Troubleshooting Linux network, security related issues, capturing packets using tools such as **IP tables**, firewall, **TCP** wrappers, **NMAP**
* Creation and scheduling **Cron Jobs** for backup, system monitoring and removal of unnecessary files
* Expertise on live upgrades in Solaris and **HP-UX** servers. Worked on migration from **UFS** root file system to ZFS root file system
* Worked on installation, configuration and manage **Red Hat** Cluster Suite in Linux Servers
* Installed, configured and managed Global File System (GFS) in Linux Servers, creating and managing Cluster suite using **GFS**
* Performed enable/disable the processes depending on the requirement and minimize the load average of the server using **Service Management Facility (SMF)** in Solaris 10.
* Worked on hard disk mirroring and stripe with parity using **RAID controllers**.
* Involved in working with **QA** team in Load and Integration testing of **J2EE** applications on **JBOSS** Application Servers.
* Installation, Management, Configuration of **LAN/WAN** systems utilizing Cisco switches and routers.
* Performed installation, configuration, upgrades, package administration and support for Linux systems on client side using **Red hat** satellite Network server
* Performed **RPM** Package Administration using **RPM** build
* Production support of **Apache, PHP, My SQL, Tomcat** including installation, configuration, management and troubleshooting.
* Installed and configured the **RPM** packages using the **YUM** Software manager.
* Defining and Develop plan for Change, Problem & Incident management Process based on **ITIL**.

**Environment:** RHEL, UBUNTU, Debian, Apache, VMware, Shell, Bash scripting, CISCO networking.

Solaris 9/10/11, Red hat Linux 4/5/6, HP-UX 11i, AIX, Sun Enterprise Servers, Sun Fire, Sun T Series, Sun M Series, HP 9000K, L, N class Server, HP & Dell blade servers, IBM RS/6000, p Series servers, VMware ESXi Server, Oracle.

**EDUCATION:**

Masters in Digital Sciences, Kent State University.