**Mounika Pasumarthi / DevOps Engineer**

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**SUMMARY:**

* DevOps and System engineer with 5+ years of experience with day to day tasks like Build and Release, Configuration Management, Installs, Upgrades, Patches, Migration, Automation, Trouble shooting, Security, Backup, Disaster Recovery, Performance Monitoring and Fine-tuning on Linux (Red Hat, CentOS and Ubuntu) systems.
* Experienced in all phases of the software development life-cycle (SDLC) with specific focus on the build and release of quality software. Experienced in Waterfall, Agile/Scrum and most recently Continuous Integration (CI) and Continuous Deployment (CD) practices.
* Designed and maintained AWS infrastructure highly available, scalable, secured, monitored and alerting network infrastructure.
* Setup and build AWS infrastructure using various resources, VPC, EC2, RDB, S3, IAM, EBS, Security Group, Auto Scaling, SES, SNS and RDS in Cloud Formationtemplates.
* Building Fault-Tolerant and High Availability applications on the AWS infrastructure by configuring Auto Scaling behind Elastic and Application Load Balancers.
* Build and configure a virtual data center in the AWS cloud to support Enterprise Data Warehouse hosting including Virtual Private Cloud (VPC), Public and Private Subnets, Security Groups, Route Tables, Elastic Load Balancer.
* Provide highly durable and available data by creating and managing policies for S3 data store, versioning, life cycle policies.
* Optimized billing cost by Provisioning Reserved EC2 instances for Production, Scheduled Reserved Instances and Spot Instances for Testing.
* Used AWS lambda to run servers without managing them and to trigger to run code by S3 and SNS.
* Proficient in scripting AWS AMIs deployment, bootstrapping and pre-baking AMIs with Packer.
* Transfer data from Datacenters to cloud using AWS Import/Export Snowball service.
* Manage Amazon Redshift clusters such as launching the cluster and specifying the node type as well.
* Experience in DevOps Environment by enhancing Continuous Delivery and infrastructure change by using Ansible and Docker to deploy code with GIT, Jenkins.
* Hands on experience and administrating Continuous Integration (CI) tools like Jenkins.
* Extensively worked on Jenkins, for continuous integration and end-to-end automation for all build and deployments.
* Experience in setting up Product level builds in Jenkins and responsible for running integration tests, box and system tests before product deployment.
* Involved in setting up Jenkins Master and multiple slaves for the entire team as a CI tool as part of Continuous development and deployment process.
* Installation, configuration and maintenance of Chef and Puppet to manage the configurations, apply patches**.**
* Used MAVEN as build tools on PHP and Java applications for the development of build artifacts on the source code.
* Build and maintain SQL scripts and execute different scripts for different environments.
* Experience in writing Ansible playbooks Cookbooks for Provisioning Dev, Test, Pre-prod, Production environments consisting of DB installations, Tomcat, WebLogic, WebSphere, Windows IIS.
* Configuring and installing VMware Virtual Center servers and VMware Vcenter Appliance.
* Monitoring the servers using Splunk tool and providing 24x7 on call support rotation basis.
* Strong experience in deploying the code through Application, Static and Dynamic on servers Apache, NGINX, Tomcat, Windows IIS, Web Sphere, Web Logic, Tomcat.
* Developed web applications by implementing Model View Control (MVC) architecture and considerable experience in various front-end technologies.
* Designed and deployed cluster for production Container orchestration with multi-AZ and self-healing, deployed with one-click through Terraform and maintained through various Ansible Playbooks.

**TECHNICAL SKILLS:**

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| Operating System | Red Hat, CentOS, Suse |
| Cloud Infrastructure | AWS |
| AWS Services | EC2, ELB, VPC, RDS, IAM, S3, AWS CLI, Trusted Advisor, CloudWatch,  CloudTrail, SNS, SQS, EBS, Elastic Cache, ECS, Lambda, Glacier,  Direct Connect, Storage Gateway |
| Continuous Integration Tools | Jenkins |
| Continuous Management Tools | Ansible, Ansible Tower, Chef |
| Versioning Tools | Bitbucket and GIT |
| Container Orchestration Tools | Docker, Kubernetes |
| Bug Tracking Tools | JIRA, Service now, Remedy |
| Scripting | Shell, Python, YAML |
| Build Automation Tools | Maven |
| Virtualization Tools | Vagrant, VMware vSphere, Oracle VirtualBox, VMware Workstation |
| Web/App server | Web Logic Application Server 9/10, WebSphere6/7/8, Apache Tomcat 5/7,  AWS, JBOSS |
| Database | DynamoDB, MongoDB, Oracle, SQL Server, MySQL |
| Network Topologies | LAN, WAN, VPN and Firewalls |
| Logging &Monitoring Tools | Nagios, Splunk |

**WORK EXPERIENCE**

**IBM, TX Apr2018 - Till Now**

**DevOps Engineer**

**Responsibilities:**

* Configure, monitor and automate Amazon Web Services as well as involved in deploying the content cloud platform on Amazon Web Services using EC2, S3 and EBS.
* Implemented CI/CD pipeline involving Bitbucket, Jenkins, Ansible for complete automation from commit to deployment.
* Building/Maintaining Docker container clusters managed by Kubernetes, Linux, Bash, GIT, Docker, on AWS Cloud.
* Utilized Kubernetes and Docker for the runtime environment for the CI/CD system to build, test, and deploy. Created Jenkins jobs to deploy applications to Kubernetes Cluster.
* Installation, Configuration and Management of RDBMS and NoSql tools such as DynamoDB.
* Experience in creating notifications and alarms for EC2 instances using Cloud Watch.
* Experienced in managing DNS using Route53 of AWS.
* Good knowledge of AWS services like Glacier, ELB (Load Balancers), RDS, SNS and IAM and hands on experience on Amazon Web Services (AWS) provision.
* Implemented a Continuous Delivery pipeline with Bitbucket, Jenkins, Docker and AWS AMI’s, whenever a new Bitbucket branch gets started automatically and Jenkins our Continuous Integration server attempts to build a new Docker container from it this Docker container has the AMI baked in and leverages Linux containers.
* Used Kubernetes for automated deployments, scaling and management of containerized applications across clusters of hosts.
* Experience in setting up TERRAFORM continuous build integration system.
* Created branches and managed the source code for various applications in GIT and Bitbucket.
* Configured Bitbucket with Jenkins and schedule jobs using POLL SCM option.
* Responsible for installing Jenkins master and slave nodes and configure Jenkins builds for continuous integration and delivery.
* Solid understanding of Project Life Cycle Management and strong experience on working of AGILE Methodologies. Good understanding on Agile Tools Rally, tracking status and setting up velocities for the projects.
* Deployed J2EE applications to Application servers in an agile continuous integration environment and automated the whole process. Build scripts using Maven build tools in Jenkins, Sonar to move from one environment to other environments.
* Provisioned AWS RDS instances like Postgres.
* Used Ansible and Ansible Tower as Configuration management tool to automate repetitive tasks, quickly deploys critical applications, and proactively manages change.
* Used Ansible to Orchestrate software updates and verify functionality.
* Collaborated with development support teams to setup a continuous delivery environment with the use of Docker.
* Developed microservice onboarding tools leveraging Python and Jenkins allowing for easy creation and maintenance of build jobs.
* Used cookbooks, recipes, roles, data bags, run list to deploy web applications, applications servers and vendor applications.
* Worked on Docker Hub, creating Docker images and handling multiple images primarily for middleware installations and domain configuration.
* Virtualized the servers using the Docker for the test environments and dev-environments needs. And, configuration automation using Docker containers.
* Experienced in build and deployment of Java applications on to different environments such as QA, UAT and Production.
* Resolved update, merge and password authentication issues in Jenkins and JIRA.

**Environment:** AWS, Docker, Ansible Tower, Jenkins, Kubernetes, RHEL 6/7, Bitbucket, DynamoDB, Shell scripts, Maven,Python, SQL, Apache Tomcat.

**AIG, Fort Worth, TX Sept 2017 -Mar 2018**

**DevOps Engineer**

**Responsibilities:**

* Actively manage, improve, and monitor cloud infrastructure on AWS, EC2, S3, RDS, including backups, patches, and scaling.
* Managed Git and Bitbucket repositories for branching, merging, and tagging.
* Designed, Installed and Implemented Ansible configuration management system.
* Developed Shell/Python Scripts for automation purpose.
* Used Ansible to manage Web Applications, Config Files, Data Base, Commands, Users Mount Points, Packages.
* Actively manage, improve, and monitor cloud infrastructure on AWS, EC2, S3, RDS, including backups, patches, and scaling.
* Wrote Ansible playbooks to manage configurations and automate installation process.
* Install and manage security reporting tools used to monitor changes to the Active Directory.
* Used security groups, network ACLs, Internet Gateways, NAT instances and iptables to ensure a secure zone for organizations in AWS public cloud.
* Used Cloud Formation and launch configurations to automate repeatable provisioning of AWS resources through AWS cli and console.
* 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.
* Docker experience automating the deployment of applications inside software containers.
* Developed scripts for build, deployment, maintenance related tasks using Python.
* Created and managed AWS resources using AWS command line and AWS management console.
* Supported various databases running on Linux servers including MySQL, Oracle.
* Applied appropriate support packages/patches to maintain system integrity.
* Installing, configuring and administering Jenkins CI tool on Linux machines.
* Regular disk management, partitioning as per the requirements, creating new file systems or increasing existing ones, managing file systems and adding virtual swap space.
* Possessing strong knowledge in Ant and Maven build tools and implementing it with Jenkins AWS services (EC2, EBS, S3, RDS, AMI, IAM, VPC, Cloud formation, Auto scaling)
* Planned, scheduled and Implemented OS patches and upgrades on Linux boxes as a part of proactive maintenance.
* Performed the daily system administration tasks like managing system resources and end users support operations and security.

**ENVIRONMENT:** Jenkins, AWS, Ansible Tower, Git, Docker, RedHat Linux 5/6/7, VMware, BMC BladeLogic 8.x, Shell/Perl scripts, RedHat Cluster, ServiceNow.

**Infotech, India Feb 2015 - May 2017**

**DevOps/AWS Engineer**

**Responsibilities:**

* Installation, configuration and administration of Red Hat Linux servers (Physical, Virtual and AWS EC2 instances).
* Part of Disaster recovery test of critical business applications.
* Join daily and weekly CAB meetings to represent the team changes requests.
* Configuring and managing services like AWS EC2, S3, EBS, AMI, ELB, VPC, Route53, Security groups, IAM and Cloud watch.
* Set up CI (Continuous Integration) for major releases in Jenkins and Docker to automate most of the build related tasks.
* Launching Amazon EC2 cloud instances using Amazon web services and configuring launched instances with respect to applications and creating customized AMIs to speed up the process.
* Configuring Elastic Load Balancers (ELB) to ensure that the traffic is distributed evenly across EC2 instances.
* Creating security groups (SG) as per industry best practices.
* Installed and Configured Jenkins for Continuous Integration.
* Managing AWS resources from AWS management console and command line.
* Provided enhanced security and identity access management (IAM) for AWS account.
* Performed all necessary day-to-day subversion/GIT support for different projects.
* Responsible for design and maintenance of Bitbucket/GIT repositories, views and access control strategies.
* Branching and merging of the code base in GIT.
* Virtualized the servers using the Docker for the test environments and dev-environments using Docker containers.
* Setup alerts using cloud watch to monitor application metrics such as performance changes and resource utilization and server health.
* Building Red Hat servers as per user request using kickstart.
* Planned and performed the upgrades to Linux operating systems and hardware maintenance like changing memory modules, replacing disk drives.
* Automated deployment of software and provisioning of Linux hosts using BladeLogic automation tool.
* Provided the support of building the server, patching, user administration tasks, deployment, software installation, performance tuning and troubleshooting and kvm.
* Installation, configuration and maintenance of Chef and Puppet to manage the configurations, apply patches**.**
* Installation and configuration of Oracle 7/8.
* Used Ant, Maven to perform daily and weekly Software Builds.
* Handling NFS, auto mount, DNS, LDAP related issues.
* Monitoring cpu, memory, physical disk, hardware and software raid, multipath, file systems, network using Nagios monitoring tool.
* Creating and extending file systems as per user requirement.
* Performing failover and integrity test on new servers before rolling out to production.
* Deployment and configuration of application server tomcat deploying java and web application.
* Writing shell scripts for automation of daily tasks, documenting the changes that happen in the environment and in each server, analyzing the error logs, analyzing the user logs, analyzing the /var/log/messages.
* Planned, scheduled and implemented OS patches and kernel upgrades on Linux boxes using BladeLogic automation tool as a part of proactive maintenance.
* Manage and monitor VMware environment (VMware ESXi and VMware workstation).
* Installed VMware VMTools on all the Linux virtual servers.
* Part of Disaster recovery test of critical business applications.
* Identify, troubleshoot, and resolve problems with the OS build failures.
* Installation, configuration, and customization of services sendmail, Apache, FTP servers to meet the user needs and requirements.
* Updated ServiceNow CMDB records for all the instances and provided support for automated and user raised tickets in ServiceNow ticketing tool.
* Performing kernel and database configuration optimization such that it limits I/O resource utilization on disks.
* Backing up and restoring files across the network.
* Wrote Technical documentation for various projects and worked with Technical writer to finalize the documents.

**Environment:**  Red Hat Linux 5/6, AWS, GIT, CHEF, Docker, Autosys, BladeLogic, VMware vSphere 4.0, VMware ESX 3.5.0, Oracle 7/8, Nagios, ServiceNow.

**Tetrasoft India Private Limited, India Jun 2013 - Jan 2015**

**UNIX System Administrator**

**Responsibilities:**

* Installation, Configuration and Administration of Linux (RedHat and Suse) and Windows 2000 servers.
* Installed and Configured LAMP Server.
* Deployed latest patches for, Linux and Application servers, performed LinuxKernelTuning.
* Implementation of Samba to help printing and file sharing in the mixed Environment.
* Involved in creating new users, groups and setup their home directories and appropriateaccess restrictions to software and directories & files.
* Developed Korn and Bash shell-scripts to automate routine activities.
* Troubleshooting OS related issues to make sure application is up and running.
* Configuring Windows Machines in Work Group Environment.
* Created File systems, Mount and unmount the NFS and local filesystems.
* Created Volume Groups, Logic Volumes and formatted with ext3/4 file systems.
* Installation and Configuration of Network Servers (dhcpd, vsftpd, httpd, LDAP).
* Create system images with Norton ghost.
* Performance Monitoring & System tuning.
* Managed Virtual Memory and swap space on RedHat and Suse Linux Servers.
* Configuration of DNS, APACHE & FTP Servers in RedHat 5/6 and Suse 10.
* Scripting and task automation using Crontab, Bash, and Korn shell scripting.
* Implementing Raid levels and changing Boot PROM values according to the requirement.
* Remote installation, configuration and troubleshooting of printers, software and business applications.
* Documenting the configurations, changes made on any part of System and Network.
* Involved in Backup of data on DAT tape drive, security, performance and availability of system and network.
* Provided support by 24x7 shift rotation basis and pager support.
* Monitored trouble ticket queue to attend user and system calls, attended team meetings, change control meetings to update installation progress, and for upcoming changes in environment.

**ENVIRONMENT:** RedHat Linux5/6, Suse 10, Windows 2000, Apache, Virtual Memory, DNS, APACHE and FTP.

**EDUCATION:** Bachelor of Engineering in Information Technology, JNTU India