****

**Mounika Avirni**

**DevOps Engineer/AWS Cloud Engineer**

**Email: mavirni0323@gmail.com**

**Contact: 5155180898**

**Professional Summary:**

Over **8+ years** of experience in IT industry with major focus on **DevOps, Software Configuration, Release management, Infrastructure management, Build/Release Management**.

* Exposed to all aspects of **software development life cycle (SDLC) such as Analysis, Planning, Developing, Testing, and Implementing and Post-production analysis.**
* Adept in Installation, Configuration and Administration of **AIX 4.3/5.1/5.2/5.3/6.1**, **Red Hat Linux 8/9**, **RHEL 3/4/5/6/7**, **Red Hat Satellite 6, OEL 4/5**and **SUSE Linux 10/11**.
* Implemented on AWS platform and its dimensions of scalability including **EC2**, **S3**, **EBS**, **VPC**, **ELB**, **AMI**, **RDS**, **IAM**, **Route 53**, **Auto scaling.** Experience in server infrastructure development on **AWS.**
* Hands on experience in writing scripts in **Python boto framework** and automate the build process.
* Experience in all facets of full CM process with tools such as **SVN**, **GIT**, **Perforce**, **Jenkins**, **TeamCity, Sonar, Subversion, Team foundation server**, **Nexus, Ansible, Chef** and **Puppet.**
* Expertise in automating build and deployments using **ANT, MAVEN, Python and Shell Scripts.**
* Experience in writing **shell scripts** for admin tasks in **MQ** and monitored various **MQ objects**.
* Efficient experience in using **Nexus** and **Artifactory** Repository managers for **Maven** builds.
* Experience in defining the manual and automation process of **CI/CD pipeline**.
* Hands on experience in Writing **Chef Cookbooks** for various DB configurations to modularize and optimize end product configuration. Developed Chef for server provisioning and automating infrastructure**.**
* Implemented **Puppet** modules and manifests to automate configuration of a broad range of services like LAMP Stack, HTTP multiple Vhosts management and pushing those modules to puppet clients.
* Extensive experience in setting up **Chef Workstation, Server and Clients**, and maintained **Chef**

**Recipes** and **cookbooks** to simplify and expedite deployment of applications and mitigate user error.

* Worked extensively on automation engine **Ansible** that automates cloud provisioning, configuration management, application deployment. Wrote playbooks and deploying applications using **Ansible.**
* Hands on experience with **Ansible** Playbooks, modules and roles and Set up Continuous Integration for major releases in **Jenkins**. Dockerized applications by creating **Docker images** from **Dockerfile**.
* Good knowledge, skills and abilities of the architecture of the **OpenShift Container Platform.**
* Proficient in managing the source code control of multiple development efforts using Clear Case, Subversion, Git and **CVS** version control tools. Worked with Bug Tracking tools like **JIRA and HP Quality center**.
* Experience in Configuring and deploying to Application servers **WebLogic** and **WebSphere**.
* Extensive experience in writing various modules like **Functions, PL/SQL Packages, Stored Procedures, Triggers and Functions** using Oracle SQL, MySQL and PL/SQL.
* Administer, install and manage **Linux** and Windows Desktops/Serversß
* Experience in building and deploying **Java & SOA** applications and troubleshooting deploy failures.
* Worked on **Docker for Application isolation** in Linux environment and handled large volumes of container clusters with **Docker swarm**, **Kubernetes** and M**esos** using Linux Virtual machines.
* Experience working with Amazon Web Services (**EC2/AWS**) **- Web consoles**, **APIs**, and **Security Groups, Elastic Load Balancer, VPC, Elastic IP’s, Route 53, Lambda, RDS and S3**.
* Hands on experience working in both **Waterfall** and **Agile methodologies** for Software Configuration Management. Good knowledge on **ITIL Process** and coordinated releases across the projects.
* Deploying system stacks for different environments like Dev, UAT, Prod in both on premise and cloud infrastructure.
* Extensive experience in **UNIX** performance tuning and Capacity Planning.
* Excellent written and verbal communication skills, strong organizational skills, and a hard-working team player.

**Technical Skills:**

|  |  |
| --- | --- |
| Operating Systems | Linux (RedHat Enterprise Linux 3.x,4.x,5.x,6.x, Fedora and CentOS, SUSE 8,10,11, Ubuntu 7.x – 14.x), Windows 95/98/XP, Solaris, MacOS X. |
| Hardware | IBM RS/6000, pseries 520, 550, 570, 575, 590, 595, 650, 630,670, M80, S80, H70 and H80, z/VM-9 series, IBM ESS (Enterprise Storage Server). |
| Virtualization Tools | VMware vSphere, Oracle Virtual box, VMware Workstation. |
| Web/Application Servers | WebSphere Application Server (WAS) 3.5, 4.0, WebLogic Server, Apache Tomcat, JBoss, Server, IBM HTTP Server. |
| Networking | TCP/IP, NIS, NFS, DNS, DHCP, WAN, SMTP, LAN, FTP/TFTP, VMware nexus switch, Cisco Routers/Switches, F5 load balancer |
| RDBMS | Oracle 7.x/8.0/9i, MySQL, MS-SQL Server and MS-Access |
| Languages | C, C++, Java, JavaScript, HTML, Python, Perl, Ruby and Shell Scripting. |
| Cloud services | AWS (EC2/SQS/SNS/S3/IAM/ELB), Azure. |
| Version Control | Subversion, Git, TFS, Perforce. |
| Build Tools/CI/CD | Maven, MS Build, Ant, Gradle, Jenkins, TeamCity, and bamboo. |
| Monitoring tools | Nagios, Splunk, Graphite, AWS cloud watch. |
| Config. Mgmt. Tools | Puppet, Chef, Vagrant, Docker, Kubernetes, Ansible, OpenShift. |

**Professional Experience*:***

**Client: ACT, Iowa City, Iowa Dec 2016 to till date**

**Title: AWS Cloud Engineer**

**Description:** ACT is a mission-driven, non-profit organization dedicated to helping people achieve education and workplace success. The project at ACT designs standardized tests and makes evaluation process more efficient. The goal for this program is to migrate ACT applications to the AWS Public Cloud for ACT Environments. I was responsible for creating CI/CD framework and containerized Dev, and QA environments for present application development teams and QA teams using Jenkins Pipeline workflow.

**Responsibilities**:

* Configured and maintained Jenkins to implement the Pipeline and integrated Jenkins with Maven
* to schedule the builds using POM.XML file.
* Automated application deployment from TFS using build templates that trigger PowerShell scripts.
* Configured TFS to run CI builds and execute unit test on all check-ins for .net web applications.
* Installed/Configured and Managed Artifactory Repository Manager (**DockerregistrySetup**).
* Generated reports using **SonarQube** which covers different areas of Code quality like potential bugs
* Worked with **IAM** service creating new IAM users &amp; groups, defining roles and Identity providers.
* Installed/Configured and Managed **GitLab** SCM for CI/CD Workflow.
* Worked on changing the application run time process using Shell and python scripts for WebLogic

configuration and shell scripts for database configuration.

* Worked with Cloud-based solutions like AWS for deploying on-demand Windows and Linux
* environments using **EC2** and **AMI**, **S3**, **IAM,** **EBS** for cloud storage services, ELB, and Auto-scaling, load- balancing

and highly scalable environments, **VPC** for virtual public and private networking.

* Implemented automated deployments with **Docker**-compose for scalable application deployment.
* Worked with Docker and Puppet on **AWS**, from helping developers and testers to build and
* containerize their application (**CI**/**CD**) to deploying on AWS Public cloud.
* Point team player On **OpenShift** for creating new Projects, Services for load balancing and adding them to Routes to be accessible from outside, Creation of **Pods** through new application and control the scaling of pods, troubleshooting pods through ssh and logs, writing/modification of Buildconfigs, templates, Image streams etc.
* Used AWS API's for automating infrastructure **OpenShift** API to automate deployment.
* Used **Cloud-Watch**logs to move application logs to S3 and create alarms and notifications for **EC2**
* hosts using Cloud Watch. Create alarms based on few exceptions raised by applications.
* Wrote **YAML** scripts to perform deploys to Tomcat Webserver and WebSphere App Servers.
* Configured Puppet to manage **AWS** environments and automate the build process for core **AMIs**
* used by all application deployments including Terraform Scripts and Puppet.
* Performed setup of clustered environment setups with WebSphere Application Server.
* Created Puppet Manifests for automating deployments of application Containers.
* Deployed code on WebLogic Application Servers for **UAT**, **IST**, and Development environments.
* Deployed **LAMP** based applications in **AWS** environment, including provisioning MYSQL- RDS and establishes connectivity between **EC2** instance and MySQL-RDS via security groups.
* Worked with the documentation of Migration process, **AWS** Deployment setup, Application Stack
* deployments and Troubleshooting Scenarios.

**Environment:** **Puppet, RHEL 6/7, MSBuild, Cloud watch, Lambda, IAM, CICD, Maven, OpenShift, Docker, Terraform, Shell Script, SonarQube, Oracle, Splunk, MangoDB, Jira, Python, Ruby, Apache Tomcat, Jenkins, GitLab, TFS, PowerShell.**

**US BANK- Gresham, OR May 2016 to Dec 2016**

**Role: DevOps /AWS Engineer**

**Description**: UA BANK is the fifth-largest bank in the United States, one of the country's most respected, innovative and successful financial institutions. The project requires true end-to-end development, testing and deployment of software products in an agile lifecycle. It helps to refine the product vision, estimate and design a solution, create, purchase or customize the requisite hardware and software to create the solution, ensure the quality of the final product through manual and automated tests, and support the new software as it is moved to production.

**JobResponsibilities*:***

* Managed **Git** repository, code merging & production deployments. Assisted developers with, applying appropriate branching, establishing labeling conventions using **Subversion**, **Git** source control.
* Maintained build related scripts developed in shell for **Maven** builds. Created and modified build configuration files including **POM.xml**. Launching and configuring of **Amazon EC2** Cloud Servers using **AMI’s**.
* Used **ANT** and **MAVEN** as a build tools on java projects for the development of build artifacts on the source code.
* Designing and implementing **CI** (Continuous Integration) system: configuring **Jenkins** servers, Jenkins nodes, creating required scripts (Perl & Python), and creating/configuring VMs (Windows/Linux).
* Implemented continuous integration using **Jenkins, Packer.** Installed **Jenkins** on a Linux machine and created a master and slave configuration through a build farm for implementation of multiple parallel builds.
* Worked with development/testing, deployment, systems/infrastructure and project teams to ensure continuous operation of build and test systems.
* Used **Redshift** to deliver fast fast query and I/O performance for virtually any size dataset by using columnar storage technology and parallelizing and distributing queries across multiple nodes.
* Used Configuration Management tool **Chef**, created Chef **Cookbooks** using recipes to automate system operations. Converting production support scripts to **Chef** recipes.
* Configuring **Chef** to build up services and applications on the instances once they have been configured using cloud formation. Used **BOTO** and **Fabric** for launching and deploying instances in AWS.
* Work with **Docker** and help improve our Continuous Delivery framework to streamline releases and reliability.
* Created **Docker images** using a **Dockerfile**, worked on Docker container snapshots, removing images and managing Docker volumes. Worked on setting up the automated build on **Docker** HUB.
* Executed Kubernetes locally with **MiniKube**, Created local clusters and deployable application.
* Used **kubernetes** to deploy scale, load balance, scale and manage **Docker` containers** with multiple name.
* Performance Monitoring of CPU, Memory, Disks, Network using various monitoring tools like **Nagios**.
* Used **Cloud watch** logs to move application logs to **S3** and create alarms based on a few exceptions raised by applications. Managed network security using L**oad balancer, Auto scaling, Security groups** and **NACL**s.
* Used **Cloud Front** to deliver content from AWS edge locations to users, allowing for further reduction of load on front-end servers. Supported current migration of Data Center to Amazon Cloud.
* Used **Octopus** deploy for automated deployment and release management server. Also used it to simplify deployment of ASP.NET applications, Windows services and databases.
* Built Cloud infrastructure for **Multi-Tier** Applications with Failover and High Availability Mode.
* Established connectivity to AWS resources in another VPC in another region using AWS **VPC peering** and **strong** **swan/IPSEC tunnel**. Experience involving configuring **S3 versioning** and lifecycle policies to and backup files.
* Processed large chunks of unstructured data using **Elastic Map Reduce (EMR)** and worked extensively with the EMR cluster. Automated Regular AWS tasks like snapshots creation using **python** scripts.
* Configured **Elastic IP** and **Elastic storage** deployed in multiple availability zones for high availability. Supported the infrastructure with highly available EC2 instances.
* Focus on continuous integration and deployment, promoting Enterprise Solutions to target environments.
* Implemented and maintained the monitoring and alerting of production and corporate servers/storage using **Cloud Watch**. Configured AWS **IAM** and Security Group in Public and Private Subnets in **VPC**.
* Documented system configurations, Instance, OS, and **AMI** build practices, backup procedures, troubleshooting guides, and keep infrastructure and architecture drawings current with changes.
* Provided oversight and guidance for the architecture, development best practices for application hosting, and infrastructure deployment for each application.
* Utilized **AWS CLI** to automate backups of ephemeral data-stores to **S3 buckets**, **EBS** and create nightly AMIs for mission critical production servers as backups.
* Responsible for maintaining 4-5 Different Testing/QA Environments and erection of the **PROD** Environment in AWS. Developed **Cloud Formation** scripts to automate **EC2** instances.
* User management including **IAM level** (AWS Console level)- by creating roles to allow user to switch roles and editing trust relationship to allow switch from main account to other account and at AWS Instance level as well.
* Created AWS **Route53** to route traffic between different regions.
* Writing **json** templates for cloud formation and **ruby scripts** for chef automation and contributing to our repository on **GitHub** (sub version control).
* Experience with analysis of logs and performing root cause analysis for various issues coming up on daily basis
* Monitoring Live Traffic, logs, Memory utilization, Disk utilization and various other factors which are important for deployment. Expert Knowledge in **Bash Shell** Scripting, Automation of **cron** Jobs.
* Utilized **Puppet** for configuration management of hosted Instances within AWS. Configuring and Networking of Virtual Private Cloud (VPC). Utilized **S3 bucket** and **Glacier** for storage and backup on AWS.

**Environment & Tools: GIT, Maven, Jenkins, Chef, Puppet, Docker, Kubernetes, Nagios, AWS EC-2, Route 53, S3, VPC, EMR, SQS, Auto scaling, ELB, Cloud Front, Cloud Watch, Python, Shell Scripts, Unix/ Linux environment.**

**Pramathi technologies Apr 2014 to Jan 2016 Linux /AWS Engineer**

**Responsibilities:**

* Building Physical as well as Virtual (VMware) Servers.
* Mass Build of Linux OS servers using kickstart /jumpstart automation application
* Installation of Oracle 11g and Sybase open-client, Apache 2.x on Linux environment.
* Worked on Installation/Configuration/Administrated VMware ESXi 5.1/5.5 & 6.0 and migrated existing servers into VMware Infrastructure
* Deploy Redhat Enterprise/OEL Linux 5.x/6.x/6.2 using Kick start installations & implement Redhat 6.x/7 also Build and configured migrations of Linux (V2V, P2P and Lift and Shift on RHEL 6.x/7)
* Develop, Architect, and Deploy Splunk in large AWS Linux environments.
* Integrate Splunk with a wide variety of legacy data sources.
* Experience with Splunk Searching and Reporting, Knowledge Objects, Administration, Add-On's, Dashboards, Clustering and Forwarder management.
* Install new / rebuild existing servers and configure hardware, peripherals, services, settings, directories, storage, etc. in accordance with standards and project/operational requirements.
* Build and configure a virtual data center in the Amazon Web Services cloud to support Enterprise Data Warehouse hosting including Virtual Private Cloud (VPC), Public and Private Subnets, Security Groups, Route Tables, Elastic Load Balancer.
* Design AWS Cloud Formation templates to create custom sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates.
* Install, configure and administer log analyzer tool CloudWatch Automated the release pipeline to achieve zero touch deployments using Jenkins, Hudson
* Design roles and groups for users and resources using AWS Identity Access Management (IAM).
* Written Cloud formation templates and deployed AWS resources using it.
* Provide highly durable and available data by using S3 data store, versioning, lifecycle policies, and create AMIs for mission critical production servers for backup.
* Worked on building data center with AWS. Installed SVN, GIT, Hudson/Jenkins images on AWS.  
  Got hands on deploying the content cloud platform on Amazon AWS using EC2, S3, and EBS, ELB, SNS, SQS services.
* Setup Amazon RDS for database integrations, MySQL. Set up MongoDB, CoucheDB with elastic search on lightweight Docker containers for easy and quick indexing services.
* Writing Chef recipes for different application for build, deployment, batch execution and environment management.
* Automating builds and deployments using ANT/ NANT scripts and perl/shell scripts.
* Delivered specific versions of various components of an application into target environments.
* Monitored/maintain/trace inventory using nagios and set alerts when the servers are full and need attention.
* Developed build and deployment scripts using ANT and MAVEN as build tools in Jenkins to move from one environment to other environments.
* Installation and configuration of tomcat and Apache Web Server
* Monitored server and application performance & tuning via various stat commands (vmstat, nfsstat, iostat etc.) and tuned I/O, memory, etc.
* Maintained proper documentation of all the activities carried out during the project.

**Environment:** Red Hat Enterprise Linux 6.x,7.x,8, Solaris 8, 9, VERITAS Cluster Server, AWS, VERITAS Volume Manager, GIT, Hudson/Jenkins, shell, Oracle 11g, HP UX, MS Windows Server, JBoss, Tomcat, Apache, Weblogic

**Cadsys, Hyderabad, India Dec 2012 to Feb 2014**

**Linux Administrator**  
**Responsibilities**:

* Installed and configured several hundred Red Hat Blade and VMware Esxi 4.x Virtual Environment.
* Configured Red Hat Cluster Nodes for any legacy applications and verified the daily health check on the Cluster Nodes.
* Assisted in physically installing, racking and cabling new BM Blade Center S and Cisco UCS 5108 Chassis environment
* Installing and configuring Red Hat Enterprise Linux 5, 6.1 using kick start servers and virtual  
  Media based installs on several hundred Cisco UCS B200 /B250 and BM Blade Center S as required for UAT/Production Oracle Web logic. Red hat JBoss, Oracle Enterprise Database and MySQL Database Server requirements
* Responsible for installation, Configuration and administration of Oracle10g/11g database on SCO Unix, Linux and Windows 2003 Servers and also an integral part of the backup and recovery.  
  Installing and updating packages using YUM (custom YUM servers/repositories) and Red Hat Satellite Server.
* Configured and Administered Apache, VSFTPD services, MYSQL and Tomcat.
* Configured various alerts, captured support logs and configured resource pools utilizing Cisco UCS Manager.
* Configured and deployed patches, upgrades, bug fixes on both physical and virtual Red Hat Linux servers using satellite servers.
* Implemented rapid provisioning and life cycle management for RedHat LINUX using kick start
* Expertise in security hardening (iptables/selinux) major Production Servers, and compiling, building and installing web server based Linux tools.
* Experience in performing, uploading and upgrading new firmware on the Interconnects and Chassis
* Proficient in providing support on the deployed Red Hat Enterprise Linux & Sun Solaris servers from both operating system level and application Level.
* Expertise in working with MySQL databases, Apache Web server, Tomcat Application Servers
* Troubleshooting any performance or configuration issues with MySQL and Oracle.
* Expertise in hardening, Linux Server and Compiling, Building and installing Apache Server from sources with minimum modules
* Monitoring and troubleshoot backups and schedule Cron jobs.
* Extensive experience in network management TCP/IP, NIS, DNS, NFS, VLAN
* Experience in database replication using OCFS2 file system with oracle 10g and 11g database
* Patch management of servers and maintaining server's environment in
* Development/QA/Staging/Production.

**Environment**: VMware 4.x, RHEL 4.x/5.x/6.x, Solaris 9, 10&11, HPUX, Centos, SUSE 10, 11, VERITAS  
Volume Manager3.x/ 4.x, VERITAS Storage Foundation 5, RedHat Cluster, VERITAS Cluster Server 4.1, Tripwire, NFS, DNS, SAN/NAS

**MakeMyTrip, Banglore, India Dec 2011 to Nov 2012**

**Unix/Linux Administrator**

**Responsibilities:**

* Installed and configured RedHat Linux 5.x/6.x using Kick Start server.
* Installation and configuration ESX hosts. Making new virtual machines, with Linux RedHat server, making templates, cloning VMs using VMware Virtual Client.
* Created and configured volume groups and logical volumes, extended logical volumes for file system growth needs using Logical Volume Manager (LVM) commands.
* Installing and updating packages using RPM.
* Configuration and installation of DHCP, DNS, web (Apache), mail (SMTP, IMAP, POP3) and file servers on Linux servers.
* Collaborate on monitoring and troubleshooting Servers using various third-party tools like Nagios.
* Managed users, disks, groups administration, File Sharing Permissions, backup and restore operations, and networking service.
* Automate configuration through Puppet.
* Responsible for installing, integrating, tuning and troubleshooting WebSphere application server.
* Lockdown the local accounts to secure the environment using NIS.
* Setup, configured and maintained NFS, NIS, and TCP/IP network, setting up SSH and SCP features between hosts.
* Maintenance, performance, tuning and testing of servers for proper functioning.
* Managing routine backup, scheduling jobs, enabling system logging and network logging.
* Troubleshooting tickets using BMC remedy.
* Worked with DBAs on installation of Oracle database.
* Installed and configured Oracle RAC 11g for database purpose.
* Setup user and group login ID's, password and network configuration.
* Developed bash shell scripts to automate routine activities.

**Environment:** Red-Hat Linux Enterprise servers 5.x/6.x, Oracle 11g, Veritas volume manager, WebSphere application server, puppet.

**WNS Global Services, Hyderabad, India May 2010 to Dec 2011**

**Jr. Systems Engineer**

**Responsibilities:**

* Installed, Configured and Upgraded Red Hat LinuxRHEL4/5/6 operating systems.
* Installed and Configured Logical Volume Manager on Linux 6.
* Installed new or rebuilding existing Servers on Oracle Enterprise Linux and configuring hardware, peripherals, services, directories, storage as per the standards and project requirements.
* Implemented RAID techniques and the created Disk groups and volumes.
* Used VMware for testing various applications on different operating systems.
* Installation, Configuration, Administration and Troubleshooting of ESX 4.x/ESXi5.x, Virtual Center.
* Installed Red Hat Linux using Kick start with the help of HTTP server.
* Configured yum repository server for installing packages from a centralized server.
* Updated Servers with latest Patches using Local repo.
* Install, configure, and troubleshoot IIS 6 on Windows 2008 2003 Servers.
* Created Physical and Logical Volumes, Volume groups, implemented disk mirroring on LVM.
* Involved in day to day maintenance and troubleshooting problems related to Linux.
* Created slices or volumes, constructing file systems, monitoring free space, disk usage, Administration& monitoring of disk based file system. Knowledge on Nagios monitoring tool.
* Configured DNS, DHCP servers & Installation of Web logic, troubleshooting etc.

**Environment: Red Hat Linux 4.x,5.x AS ES, IIS, Oracle 9i/10g, Samba, NT/2000 Server, Web sphere, Web Logic 8.1, VMware ESX 2.x, Apache Server 1.x,2.x, Bash**