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**Mounika Avirni**

**DevOps Engineer/AWS Cloud Engineer**

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**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 ShellScripts.**
* Experience in writing **shell scripts** for admin tasks in **MQ** and monitored various **MQobjects**.
* 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, configurationmanagement, 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**.
* 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, MySQLand PL/SQL.
* Administer, install and manage **Linux** and Windows Desktops/Servers
* Experience in building and deploying **Java & SOA** applications and troubleshooting deploy failures.
* Worked on **Docker for Application isolation** in Linux environment andhandled 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** forSoftware 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:**

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| --- | --- |
| 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, WebLogicServer, 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. |

**ProfessionalExperience*:***

**Client: ACT, Iowa City, Iowa Dec 2015 totill 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.
* 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, Docker, Terraform, Shell Script, SonarQube, Oracle, Splunk, MangoDB, Jira, Python, Ruby, Apache Tomcat, Jenkins, GitLab, TFS, PowerShell.**

**US BANK- Gresham, ORMay 2014 to Dec 2015**

**Role: Sr. 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 projectrequires 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 **strongswan/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.**

**Ameriprise, Minneapolis, MN Oct 2012 to April 2014**

**Build-Release/SCM Engineer**

Ameriprise Financial, Inc. is a diversified financial services company that offers financial solutions to individual and institutional clients. The Company operates in five segments: Advice & Wealth Management; Asset Management; Annuities; Protection, and Corporate & Other. As a SCM Engineer I was responsible for multiple application release cycles.

**Responsibilities:**

* Coordinated with the **Development, Database Administration, QA, and IT Operations teams** to ensure there are no resource conflicts.
* Resolving **Release conflicts** regarding dates and accommodating in various Release/Build windows by negotiating with customers based on priority and other factors.
* Addressing **dependencies** and handling issues with release of interdependent projects especially in the **RESTful** and **SOAP** Web services.
* Managed the code migration from **Subversion** and to **Git** repository.
* Created repositories according the structure required with branches, tags and trunks.
* Attended sprint planning sessions and daily sprint stand-up meetings.
* Configured application servers **(JBOSS)** to deploy the code.
* Used **Perl and Shell** scripts for deployment automation.
* EnhancedConfiguration Managementusing**PUPPET**as configuration management toolto assist with automated, repeatable, and consist configuration and application deployments.
* Developed automated build system for **ASP.net web application** through CI tool Jenkins.
* Built Java code on to different **Jenkins** servers as per the schedule.
* Worked on **Ant-Maven** conversion process by authoring **POM** Files.
* Merged release branches to the trunk after the production release and resolved the conflicts if any during the merge in Subversion. Developed automation scripting in **Python** to deploy some applications.
* Responsible for **scaling/upgrading/maintaining** the application.
* Installed and administered **Bugzilla** bug tracking system with **MySQL** database and Apache webserver on RedHat Linux Operating System.
* Documented all post-deployment issues in a log and assist in resolving these issues where applicable, maintaining timely updates within the log.

**Environment:Perl Scripting, Puppet, Python, Shell Scripting, MySQL, Subversion, Jira, ANT, Maven, GIT, Jenkins, Java, C++, J2EE, JBOSS, Web sphere.**

**American National Bank Jan 2011 to Sep 2012**

**Cleveland, OH**

**Role: Build and Release Engineer**

**Description:** American National Bank is one of the secured financial institutions that serves huge domain of customers. Bank offers various financial and banking services to its customers. The current application is a part of online banking that allows a customer to pay bills securely as well as enroll in monthly automatic recurring bill payment. The functionalities involved in e-bill payment are Add a Payee, make a Payment, set up Automatic Payments, Receive Bills Electronically, Request E-mail Notifications and Review Payments. The application also supports intra and interbank transfer of funds for a given customer.

**JobResponsibilities*:***

* As member of Release Engineering group, redefined processes and implemented tools for software builds, patch creation, source control, and release tracking and reporting on **Unix/Linux** platform.
* Performed deployment of application code to production environments.
* Built and Deployed **Java/J2EE** to a web application server in an **Agile** continuous integration environment and automated the whole process. Build and deploys **J2EE** applications in **Web Sphere**.
* Developed **Perl** and **shell** scripts for automation of the build and release process.
* Perform software builds using version control tool IBM Rational **ClearCase** (UCM and BASE).
* Supporting engineering plans and schedules by providing CM / Release Engineering services to build, deploy.
* Assist with maintaining current build systems, developed build scripts, maintained the source control system.
* Managed the source codes repository of multiple development applications using **SVN** version control tools.
* Involved in editing the existing **ANT** (Build.XML) files in case of errors or changes in the project requirements.
* Worked with transition project that involved migration activities from **Ant** to **Maven** to standardize build across all applications. Used **Nexus** as a repository in Maven, worked with Snapshots and releases.
* Used**Jenkins** as a continuous integration tool for automation of daily process and Responsible for building and releasing packages for testing.
* Responsible for installing **Jenkins** master and slave nodes and also involved in plugin Git and schedule jobs using Poll SCM option and also Creating the build scripts using **Maven** for Java projects.
* Merged release branches to the trunk after the production release and resolved the conflicts if any during the merge in Subversion. Developed automation scripting in **Python** to deploy some applications.
* Responsible for designing and deploying best **SCM** processes and procedures.
* Perform periodic system audits on all environments to ensure that only controlled versions of software reside all environments. Used **Puppet** to maintain configuration on Linux servers.
* Used **Clear Quest** as Ticketing Tracking tool. Created analytical matrices reports for release services based on Remedy tickets.

**Environment & Tools: Java/J2EE, Unix, Maven, GIT, ANT, Jenkins, Puppet, Web Sphere. Python, Clear Case, Perl Scripts, Shell Scripts, Clear Quest.**

**AAA Insurance, Phoenix, AZ Dec 2009 to Dec2010**

**Build and Release Engineer**

**Job Responsibilities:**

* Release Engineer for a team that involved different development teams and multiple simultaneous
* Developed and implemented Software Release Management strategies for various applications

according to the agile process

* Participated in weekly release meetings with Technology stakeholders to identify and mitigate

potential risks associated with the releases

* Imported and managed multiple corporate applications into source code **SVN**
* Provided end-users training for all Tortoise **SVN**, **JIRA** users to effectively use the tool
* Deployed the artifacts to Artifactory automatically from Jenkins
* Build scripts using **ANT** and **MAVEN** build tools in Jenkins to move from one environment to other

environments

* Deployed **J2EE** applications to Application servers in continuous integration environment and also
* automated the whole process
* Developed **Perl** and **shell** scripts for automation of the build and release process.
* Involved in editing the existing **ANT**/**MAVEN** files in case of errors or changes in the project

requirements

* Managed Maven project dependencies by creating parent-child relationships between Projects
* **Jenkins** is used as a continuous integration tool for automation of daily process.
* Used **SQL** queries to check the data integrity on an Oracle data baseDocumented the entire build and release engineering process and provided on call support

**Environment**: **ANT, MAVEN, Tortoise SVN 1.6, 1.7, Jenkins, Java/J2EE, Web Sphere 6.1.1, Perl Scripts, Shell**

**Scripts, XML, UNIX, Windows XP, Oracle10g, 11g, JIRA**.

**WNS Global Services, Hyderabad, India Sep 2008 to Dec 2009**

**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**