

## Radhika Garmella Email ID: radhika.garmella2@gmail.com Contact: +15103617627 CloudDevOps/AWS Engineer

## DevOps/Automation Engineer || Build & Release Engineer

#### **PROFESIONAL SUMMARY:**

A Fast-paced software professional with 7 years of experience in IT industry comprising of **Linux System Administration**, **DevOps Engineering**, and in **automating**, **building**, releasing of code from one environment to other environment and deploying to servers. Extensive experience includes **AWS**, **DevOps**, **SCM**, **Build/Release Management** and **Cloud Management** and **Containerization**.

- Hands-on experience in Automation, Configuring and Deploying instances on Amazon web services (AWS) and experience with AWS components like EC2, ELB, Auto scaling, S3, VPC, Route53, Cloud Watch, Cloud Trial, Cloud Formation Templates.
- Good working knowledge on AWS IAM service, IAM policies, Roles, Users, Groups, AWS access keys and Multi Factor Authentication. And migrated applications to the AWS Cloud.
- Experience with AWS Command line interface and PowerShell for automating administrative tasks. Defined
  AWS Security Groups which acted as virtual firewalls that controlled the traffic reaching one or more AWS
  EC2, LAMBDA instances.
- Hand-On experience in Implementing, **Build and Deployment** of **CI/CD** pipelines, managing projects often includes tracking multiple deployments across **multiple pipeline stages** (**Dev, Test/QA staging and production**). Implement **CI/CD** tools Upgrade, Backup, Restore, API call, **DNS, LDAP,** and **SSL** setup.
- Proficient in tracing complex build problems, release issues and Implemented Continuous Integration and deployment using various CI Tools like Jenkins, Bamboo, Chef, Puppet, Ansible.
- Strong experience creating ANT/MAVEN with Ansible scripts for deployment. Experience with Maven (Pom.xmls) and Ant (build. XMLs).
- Configuration Management and source code repository management using tools like GIT, Subversion (SVN),
   BitBucket.
- Worked with **Docker** and **Vagrant** for different infrastructure setup and testing of code. Written build scripts from scratch for new projects and for new modules within existing projects.
- Worked with **Vagrant** for local development setup. Moved **Vagrant** setup to **Docker** based environment and experienced in writing **Vagrant file and Docker file**.
- Focused on containerization and immutable infrastructure. Experience on clustering and container management using **Docker Swarm** and **Kubernetes**.
- Working knowledge on **Kubernetes, Aurora,** and **RDS**. Good experience in **Middleware** services like **JMS, JDBC** and implemented other services like **JNDI, SNMP**.
- Used **Terraform** to map more complex dependencies and identify network issue. Hands on experience on Terraform a tool for building, changing, and versioning infrastructure safely and efficiently.
- Created and Maintained **Chef Recipes** and **cookbooks** to simplify and expedite deployment of applications and mitigate user error.
- Used **Python** programming and language to develop a working and efficient network within the company. Utilized Python in the handling of all hits on **Django Redis** and other applications. Performed research regarding Python Programming and its uses and efficiency.
- Expertise in component repository management tools like Nexus, JFrog Artifactory etc.
- Installed, Configured, Managed Monitoring Tools such as ELK Stack, Splunk, Nagios, AppDynamics.
- Hands on experience with build tools like, **Team City, Sonar**. Worked with different **Bug** tracking tools like **JIRA, Rally, Remedy,** and **IBM Clear Quest**.

- Experienced administrator skills on **Linux/UNIX** distributions (Red Hat/CentOS, Ubuntu, Solaris and AIX) and Windows flavors. Installed Linux/Unix distributions and configured various services as per the requirement using **Puppet**.
- Designed and deployed a scalable LINUX/Windows infrastructure that seamlessly integrated a network storage server, LDAP servers and SAMBA servers. Reduced infrastructure complexity by 60% and improved development productivity by 50%.
- Worked with other internal IT teams to complete project activities (Architecture and Database teams).
- Worked with **VMWARE** tools like **vCenter & vSphere** to manage VM's running on ESX cluster nodes and also experience working on **vMotion**.
- Involved heavily in setting up the CI/CD pipeline using Jenkins, Maven, Nexus, GitHub, CHEF, Terraform and AWS.
- Experience in **creating** and **managing user accounts**, **Security policies**, **Rights**, **Disk spaces**, **Disk quotas** and **Process monitoring** in CentOS and Red Hat Linux.
- Experience in configuring NIS, DNS, DHCP, NFS, SAMBA, FTP, Remote Access Protocol, Security Management, Security trouble shoots and SOA-based applications. Expertise in installations of SQL server, MYSQL server and PostgreSQL.
- Experience in **Linux/Unix** System Administration, Network Administration and Application Support working on **Red Hat Linux 6/7, SUSE Linux 10/11.**
- In-depth knowledge of computer applications and **shell scripts (Bash), Ruby, Python**, and **PowerShell** for automating tasks.
- Experience in Build/Release/Deployment/Operations (Devops) engineer with a strong background in Linux/Unix Administration and best practices of SDLC methodologies like Agile, Scrum, waterfall and Devops/Cloud processes.
- Ability to quickly understand, learn and implement the new system design, new technologies, data models and functional components of software system in a professional work environment.
- Able to build solid relationships within as well as consensus across multiple teams on environment strategies of build and release process.

### **TECHNICAL SKILLS:**

Platforms	Red Hat Linux, CentOS, Ubuntu, SUSE, VIOS 2.1/2.2, HP-UX 11, IBM AIX, Windows, Windows Server, VMware ESX and Mac OS.
Cloud	AWS EC2, S3, RDB, ELB, EBS, VPC, Auto Scaling, Dynamo DB. Azure Cloud and Office 365 Cloud Exchange
Versioning Tools	GIT, SVN, Perforce, Clear Case, CVS and Bit Bucket.
Database	Cassandra, Mesos, MongoDB, MYSQL, SQL Server 2012/2014
CI Tools	Jenkins, Bamboo and CVS.
Build Tools	ANT, Maven, Gradle.
Bug Tracking Tools	JIRA, Rally, Remedy and IBM Clear Quest.
Configuration Management	Chef, Puppet, and Ansible
Containerization Tools	Docker.
Scripting	Shell scripting, Python, Perl scripting
Web technologies	HTML, CSS, SOAP, REST
Application Servers and	WebSphere, WebLogic, and Tomcat, Apache server, Glass Fish, Jboss.
Web servers	
Monitoring Tools	Splunk, Nagios, Solarwind, fixstream.

#### **PROFESSIONAL EXPERIENCE:**

Client: Wells Fargo, San Francisco, CA. Nov 2017 to Present

**Role: AWS DevOps Engineer** 

- Collaborated in the automation of AWS infrastructure via terraform, deployed micro services, including
  provisioning AWS environments using Ansible Playbooks. Designed, Installed and Implemented Ansible
  configuration management system.
- Experience as **Cloud AWS DevOps Engineer** project teams that involved different development teams and multiple simultaneous software releases.
- Automated repetitive tasks within the technical infrastructure to streamline and improve overall quality through the high availability of resources resulting in a 36% reduction in support times
- **Data migration** from on prem data centers to **AWS cloud**. Creating the infrastructure for data migration in AWS Cloud.
- Performed the automation deployments using **AWS** by creating the **IAMs** and used the code pipeline plug-in to integrate **Jenkins** with **AWS** and also created the **EC2** instances to provide the virtual servers.
- Involved in Designing and deploying AWS solutions using EC2, S3, RDS, EBS Volumes, Elastic Load Balancer, Auto Scaling groups, Lambda Functions, Apigee, CloudFormation Templates, IAM Roles, Policies.
- We migrated from our company datacenter to AWS using their services for our projects for server based centos, red hat for development, QA, UAT, Prod environments and provide access to all teams who worked on that applications.
- Manage the development, deployment and release lifecycles by laying down processes and
  writing the necessary tools to automate the pipe. Worked with **Terraform** key features such as Infrastructure
  as code, Execution plans, Resource Graphs, Change Automation
- Manage 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. Automated the regular build and deployment processes for pre-prod and prod environments using Tools such as Maven following the Software Implementation Plan.
- Wrote custom groovy scripts to automate CI/CD pipelines in Jenkins.
- Used Maven dependency management system to deploy snapshot and release artifacts to Nexus to share
  artifacts across projects. Configured and maintained Jenkins to implement the CI process and integrated the
  tool with Ant and Maven to schedule the builds. Worked with Hudson/Jenkins continuous integration servers
  to write/perform sanity checks as well as automatic rpm builds.
- Assisted developers with establishing and applying appropriate branching, labeling/naming conventions using GIT source control.
- Actively participate in high level team activities such as suggesting architecture improvements, recommending
  process improvements and conducting tool evaluations. System troubleshooting and problem solving across
  platform and application domains will be expected to participate in on-call escalations to troubleshoot
  customer facing issues.
- Collaborate with development team to define **architecture**, **optimize performance**, and right size environments. Deep knowledge of continuous integration and configuration management tools
- Maintained a high availability clustered and standalone server environments and refined automation components with scripting and configuration management (Ansible)
- Wrote **Ansible playbooks** which are the entry point for Ansible provisioning, where the automation is defined through tasks using **YAML** format. Run Ansible Scripts to provision Dev servers.
- Installing, setting up & Troubleshooting Ansible, created and automated platform environment setup.
- Wrote Ansible Playbooks with Python, SSH as the Wrapper to Manage Configurations of AWS nodes and Tested Playbooks on AWS instances using Python. Run Ansible Scripts to Provide Dev Servers.

- Responsible for Continuous Integration and Continuous Delivery process implementation using **Jenkins** along with **Python** and Shell scripts to automate routine jobs.
- Worked on AWS Elastic Beanstalk for fast deploying of various applications developed with Python, Ruby and Docker on familiar servers such as **Apache** and **IIS**.
- Wrote Ansible Playbooks with Python SSH as the Wrapper to Manage Configurations of AWS nodes and Tested Playbooks on AWS instances using Python.
- Migrated VMware VMs to AWS and Managed Services with Ansible. Working with GitHub to store the code and
  integrated into Ansible Tower to deploy the playbooks. Created user level of access for related GitHub project
  directories to the code changes.
- Used Artifactory repository Tool for maintaining the Java based release code packages and Responsible for build and deployment automation using AWS, Docker, Kubernetes Containers. Deployed applications using Docker Containers in the cloud with PaaS.
- Experience on **Java** Multi-Threading, Collection Framework, Interfaces, Synchronization, and Exception Handling.
- Written Shell Scripts to apply the Integration label to all the files which needs manual labelling of files.
   Configured the user accounts for Continuous Integration Jenkins, Nexus and Sonar. Handled Jira Tickets for SCM Support activities.
- Installed, Configured and Managed Monitoring Tools such as **AppDynamics**, **Cloud Watch** for Resource Monitoring.

**Environment:** AWS, Git, GitHub, Jenkins, Ansible, Nexus, Docker, Kubernetes, Terraform, Nagios, Jira, AppDynamics, Cassandra, ANT, Shell Scripts, ELK, Groovy, JavaScript, JSON, Python.

Client : Lowe's, Mooresville, NC May 2016 — Nov

2017

Role: DevOps Engineer

- Configured folder management in AWS S<sub>3</sub> buckets and monitored cloud logs in each bucket and used autoscaling and load balancers for high availability. Collaborated in the automation of AWS infrastructure via Bamboo, software and services configuration via chef cookbooks.
- Launched Amazon EC2 Cloud Instances using Amazon Web Services (Linux/Ubuntu) and configuring launched instances with respect to specific applications. Managed AWS EC2 instances utilizing Auto Scaling, Elastic Load Balancing and Glacier for our QA and UAT environments.
- Created automation for many AWS specific tasks such as parsing a csv for automated read/writes into Dynamo
  DB so that changes are source controlled and automated via Bamboo. Transferred systems from on-premise
  to AWS Cloud platform and developed Cloud Formation templates to automate the deployments.
- Written wrapper scripts to automate the deployment of cookbooks on nodes and running the chef-client on them in a Chef-Solo environment.
- Written **Chef Recipes** to automate our build/deployment process and do an overall process improvement to any manual processes. Also bootstrapped many instances using chef and integrating them with **auto scaling**.
- Architected and designed Rapid deployment method using **Chef** to auto deploy servers as needed. Created **cookbooks** and writing recipes using **ruby** language for provisioning **ELK** on servers and production servers.
- Automated the cloud deployments using chef, python and AWS Cloud Formation Templates.
- Adept at build deployment, build scripts and automated solutions using scripting languages such as Shell and Python. Developed monitoring and notification tools using Python. Scripted Linux repository database comparisons using Python Able to create scripts for system administration and AWS using languages such as BASH and Python. Created scripts in Python which integrated with Amazon API to control instance operations.
- Focused on containerization and immutable infrastructure. Docker has been core to this experience, along with Mesos, Marathon and Kubernetes.

- Wrote custom groovy scripts to automate CI/CD pipelines in Jenkins.
- Configured Bamboo plugins to pull code from Bitbucket and created a pipeline process where the code is built
  immediately after pulling by using build tools like ANT and after creating the artifacts are deployed into
  repositories Jfrog Artifactory.
- Deployed code on **WebSphere**/ **WebLogic/Apache/Tomcat/JBOSS** application Server for **Development, QA** and **Production** environments. Migrated from Physical servers to Virtual Machines Using **VMware**, Backup is made using **VM Replication**. Installed **VMware ESXI 5.5, 6.0, 6.5**, VMware Vcenter server in rack servers.
- Configured RDS instances using Cloud formations and **Terraform**. Worked with Terraform to create AWS components like EC2, IAM, VPC, ELB, Security groups.
- Automated the process in Jenkins in such a way that whenever GitHub branch gets updated it automatically builds a new Docker container which consists of AMI. Testing and production environment has been assigned to a single physical host running Docker.
- Created virtual instances with Docker. Worked on several Docker components like Docker Engine, Hub, Machine, creating Docker images, Compose Docker Registry and handling multiple images primarily for middleware installations and domain configurations.
- Worked with **Docker** components like **Docker engine**, **hub**, **compose** and **registry** for storing docker images and files running multiple containers in **staging** and **production** environments.
- Created monitoring profiles and generated alerts for the production support teams using **Splunk**. Created Dashboards to monitor the response times, warnings, errors and traffic volumes across various datacenters, applications and servers.
- Used Kubernetes to provide a platform for automating deployment, scaling, and operations of application containers across clusters of hosts. Managed local deployments in Kubernetes, creating local cluster and deploying application containers. Used **Docker container** clusters to clone the production servers and implementing Kubernetes orchestration for clone production servers.

**Environment:** AWS, Terraform, Bamboo, chef, Jenkins, Docker, Kubernetes, Splunk, Ruby, Bitbucket, ELK, Mesos, ANT, JFrog, WebSphere, WebLogic, Apache, Groovy, Tomcat, JBOSS, VMWare.

Client: Itelligence Cincinnati, Ohio Role: DevOps/Automation Engineer Nov 2014 – March 2016

- Design and setup of Crucible, Bitbucket Server, Jenkins, SonarQube, Microfocus SCA, JFrog on Linux servers.
- Executed application software build and deployments supporting applications across the enterprise. Worked
  with application development and Operations teams to understand project specific needs with in DevOps
  core functions and implement the same.
- Maintained Source Control branches, Control engineering team's access to those branches from time to time depending on the release schedules using **Bitbucket**. Migrated applications from **SVN** to **Bitbucket**.
- Configured **Bitbucket** repositories with branching, forks, tagging, and notifications. Experience and proficient in deploying and administering **Bitbucket**. Implemented a **CI/CD** framework using **Jenkins** in Linux environment and Integration of **Jenkins**, **Bitbucket**, **Junit**, **SonarQube**, **Maven**, **Cucumber**, **Confluence**, **Jira and Micro Focus SCA**.
- Developed **Java** and **Apigee** pipelines with industry standard tools and quality checks. Ensured to meet code quality and security standards by implementing Quality gates using **SonarQube, HP fortify** and **Linting.** Managed the builds and its dependencies in the secured Artifactory using **JFrog** Artifactory and **Maven**.
- Integrated BDD test cases setup using Cucumber for java applications. Responsible for automated deployment of applications in WebLogic server using WLS. Co-ordinated the promotion of code to test, QA, stage, and production environments in support of all roadmaps and emergency releases. Achieved Zero Downtime Deployment for WebLogic and tomcat servers.

- Designed high quality Pipeline process for **zero downtime** with proper health check in **admin mode**. **Sanity and integration** checks are done after new version deployment and reverted script if build was not as excepted. Deprecation of old version after serving all existing users. All the steps are integrated using **ansible** playbook.
- Developed Generic python scripts using pyral API and configured with cron jobs for automatic ticket processing. Processed Rally tickets for creating branch, tag and commits raised by developers and admins. Implemented two factor approvals from email and ticket content. Designed ticket maintenance like close, update and send for approval using python scripting. Integrated with Jenkins to create rally tickets from Jenkins for approvals.
- Configured the build environments for web-based enterprise applications and competent in application troubleshooting through ansible. Worked on installing of **Docker** using **Docker** toolbox and worked on creation of **Docker** containers and **Docker** consoles for managing the application life cycle.
- Worked with Docker Management Platform, Leveraged Custom Docker Images as Containerized Apps within
  the Docker Engine. Creating, managing and performing container-based deployments using Docker images
  containing Middleware and Applications together. Deployed Docker Engines in Virtualized Platforms for
  containerization of multiple apps.
- To achieve Continuous Delivery(CD) goal on high scalable environment, used Docker coupled with load-balancing tool Nginx. Implemented several Tomcat Instances by using the Docker engine for running several Containerized Application Servers. Managed Centralized logging using ELK stack to facilitate easy monitor and fault analysis. Configured and monitored Linux infrastructure using Nagios.
- Maintained the Project Related Documents and Standard Practices in Confluence pages. Worked in a fastpaced Agile type environment. Coordinated with developers, Business Analyst, and Managers to make sure that code is deployed in the Production environment

**Environment:** Crucible, Bitbucket, Jenkins, Junit, SonarQube, JFrog, Apigee, Newman, Apigee lint, Cucumber, Apickli, WebLogic, Maven, Ansible, Pyral, Java, Agile, Apache HTTPD, Apache Tomcat, Docker, Bash, Shell, Perl, Python, PHP, Ruby, HP Fortify, Rally, ELK, Nagios, Confluence.

Client: AT&T, San Francisco, USA Role: Build and Release Engineer June 2013 - Oct 2014

- Worked on **Continuous Integration System** i.e. **Jenkins**. Used Jenkins for official nightly build, test and managing change list. Installed Multiple Plugins for smooth build and release build pipelines.
- Developed build and deployment scripts using **ANT** and Apache **MAVEN** as build tools in Jenkins to move from one environment to other environments.
- Extensive experience in using Version control systems includes Subversion (SVN), GIT, and ClearCase.
  Involved in migrating from SVN to GIT. Connected continuous integration system with GIT version control
  repository and continually build as the check-inn's come from the developer. Analyze and resolve conflicts
  related to merging of source code for GIT. Performed all necessary day-to-day Subversion/GIT support for
  different projects.
- Worked on **Continuous Integration System** i.e. **Jenkins**. Used Jenkins for official nightly build, test and managing change list. Installed Multiple Plugins for smooth build and release build pipelines.
- Proficient with **Jenkins** and **Bamboo** for continuous integration and for End-to-End automation for application build and deployments.
- Managed, configured servers to automate tasks and deploy apps on Virtual Machines, Bare-Metal and Cloud
  Instances using a tool Foreman along with Puppet. Experienced in installing, configuring, administrating
  Jenkins on Linux machines alongside updating plugins like GIT, Maven, SVN and Puppet.
- Managed Ubuntu Linux and Windows virtual servers using Puppet and Practical/hands-on knowledge on using Mcollective, Hiera in conjunction with puppet modules.

- Used configuration Management tool like puppet to enable continuous Deployments. Experienced with
  working on Puppet Master and Puppet Agents. Defined Puppet Master and Puppet Agents to manage and
  configure nodes.
- Experience working with Puppet Enterprise and Puppet Open Source. Installed, configured, upgraded and managed **Puppet Master, Agents & Databases**. Integration of **Puppet** with Apache and Passenger.
- New Development workflow uses different open source tools like Server Spec, Rspec, Vagrant and Packer to
  validate changes across different puppet modules. Experience integrating JUnit, Find Bugs, Check style code
  analysis and testing during the build.
- Having production experience supporting and deploying to web application servers such as **WebLogic**, **JBOSS**, **Apache**, **Tomcat**, and **Apache** HTTPD servers.
- Developed and implemented an automated Linux infrastructure using **Puppet.** Installed and configured an automated tool Puppet that included the installation and configuration of the **Puppet master, agent nodes** and an admin control workstation.
- OS installation using remote installation tools (PXE/kickstart/CFengine/Puppet) Managing Linux infrastructure using single, integrated tools for efficiency, speed such as Puppet/CFengine.
- Experience in designing and configuring open source management tools Puppet, Chef and CFengine in Devops Environment.
- Experience in writing **Puppet manifests** to automate configuration of a broad range of services. Involved in Setup and Configuration of **Puppet Configuration Management**.
- Set up Jenkins build jobs to provide one click deployments of the latest software build to WebSphere clusters
  for use by developers and support personnel. These were implemented using a combination of Jenkins
  configuration, BASH scripting.
- Build and maintain **SQL** scripts and execute different scripts for different environments.
- Responsible for writing the Release Notes, documenting all the useful info about the release, software versions, changes implemented in current release, Defects fixed, Labels applied.
- Deployed Java/J2EE applications on to Apache Tomcat application servers and configured it to host the wiki website. Configured and maintained Hudson to implement the CI process and integrated the tool with Ant and Maven to schedule the builds.
- Getting the list of issues from the components (project, module, file etc.) with the help of **SonarQube.** Involved in identifying build errors in the system and identify the build issue and escalate it to the concerned team after careful analysis. Work and coordinate with them to get the fix in the release.
- Created variables, using **Informatica** power center to score the policies, a process that increased the renewable policies by 35%.
- Acted together with the users to design the underlying data warehouse and marts.
- Analyzed and executed the test cases for various phases of testing integration, regression, and user

<u>Environment:</u> GIT, SVN, Bamboo, Jenkins, Puppet, Java/J2EE, ANT, MAVEN, JIRA, ceph, TeamCity, ETL,LINUX, XML, Windows XP, Windows Server 2003, Web logic, MY SQL, Perl Scripts, Shell scripts.

# Client: Arya Systems, Hyderabad, INDIA Role: Linux Adminstration

July 2012 - June 2013

- Performed installation, configuration, upgrades, Package administration and support for Linux Systems on client side using Red hat satellite network server.
- Worked on RedHat Linux installation, configuring and maintenance of applications on this environment. Performed automated installations of Operating Systems using kickstart for Linux.
- Package management using RPM, YUM and Update in Red Hat Linux Installation and configuration from scratch and regular monitoring.
- Scanning LUNs from SAN and creating Volume groups, creating and extending LVM and file systems online.
- Scheduled users to perform High Performance Computing activities on the Linux cluster.

- Created users, manage user permissions, maintain User and File system quota on Linux servers.
- Experience managing and tuning MySQL and writing SQL scripts.
- Identified and solved any issues or errors.
- Applied patches and supported Linux Servers with Oracle Database servers.
- Worked on Kernel tuning and Kernel patching.
- Configuring SUDO and granting root permission to Backup Admins/DBAs to perform root related activities.
- Creating and modifying Standing Operating procedures for the team.
- Automated system management tasks like user account creation, file system size monitoring, monitor system resources and system maintenance using Shell scripts.
- Managed Disk using LVM, resized disk space when required. Managed disk space from NetApp filers
- Setup NTP server and synchronized clients with NTP server.
- Troubleshoot application problems by diagnosing issues.
- Troubleshooting Backup and Restore Problems, Creation of LVMs on SAN using Linux utilities.
- Monitored overall system performance, performed user management, system updates and disk & storage management.
- Performed OS upgrades and Patch loading as and when required.
- Setup SSH password less login in Open SSH.
- Network installation via centralized yum server for client package update.
- Experience in using various network protocols like HTTP, UDP, FTP, and TCP/IP.
- Migrated database applications from Windows 2000 Server to Linux server.
- Installing and setting up Oracle9i on Linux for the development team.
- Linux kernel, memory upgrades and swaps area. Red hat Linux Kickstart Installation.
- Experienced in Red Hat Linux package administration using YUM configuration like assigning IP addresses.

Environment: Red Hat Enterprise Linux, Shell-Scripting, LVM, Windows, RPM, YUM, NFS, LVM, HTTP, FT