

VENKATA A

Sr. Cloud / DevOps Engineer

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Professional summary:

Sr. Cloud & DevOps professional 7+ years of IT Experience as Cloud/DevOps Engineer comprising of Linux and System Administration with major focus on AWS, Azure, OpenStack, Continuous Integration, Continuous Deployment, Configuration Management, Build/release Engineer and Linux Systems Administrator with expertise in Private, Public and Hybrid Cloud platforms along with using various tools like Docker, Kubernetes, Ansible, OpenShift, Chef, Jenkins, Git, Maven.

- Experience in **AWS** Services EC2, IAM, Subnets, VPC, Cloud Formation, AMI, S3, SNS, SES, RedShift, CloudWatch, SQS, Route53, CloudTrail, Lambda, Kinesis and RDS and obtaining **High Availability and Fault Tolerance for AWS EC2** instances utilizing the services like Elastic IP, EBS and ELB.
- Experience in AWS Cloud Formation templates to create customized VPC's, subnets and NAT to ensure successful deployment of Web applications, also expertise in AWS server less compute service Lambda and used AWS lambda to trigger changes in data shifts and action by users and run the code in the **Postgres DB**.
- Experience in Converting existing **Terraform modules** that had version conflicts to utilize **CloudFormation templates during deployments**, worked with Terraform to create stacks in AWS, and updated the Terraform scripts based on the requirement on regular basis.
- Experience in integrating **Terraform with Ansible, Packer** to create and Version the AWS Infrastructure, designing, automating, implementing and sustainment of Amazon machine images (AMI) across the AWS Cloud environment.
- Excellent knowledge in Azure compute services, Azure Web apps, Azure Data Factory & Storage, Azure Media & Content delivery, Azure Networking, Azure Hybrid Integration, and Azure Identity & Access Management.
- Experience in **Azure IaaS, PaaS**, Provisioning VM's, Virtual Hard disks, Virtual Networks, Deploying Web Apps and creating Web-Jobs, Azure Cosmos DB, Active Directory, Azure Windows server, Microsoft SQL Server, Microsoft Visual Studio, Windows PowerShell, Cloud infrastructure.
- Experience in **cloud automation and orchestration framework** using AWS, Azure and **OpenStack**. Implemented multi-tier application provisioning in **OpenStack cloud**, integrating it with PUPPET, migrating the application using MAVEN as build tool.
- Experience with setting up **Chef Infrastructure**, bootstrapping nodes, creating, and uploading recipes, node convergence in **Chef SCM** used Chef for server provisioning and infrastructure automation, release automation and deployment automation, Configure files, commands, and packages.
- Experience in Ansible setup, managing hosts file, **using YAML**, authoring various playbooks and custom modules with Ansible and worked on Ansible Playbooks to automate in AWS services like Launching EC2, Provisioning IAM, Configuring VPC, EBS, **Monitoring using CloudWatch and CloudTrail**.
- Hands on experience with puppet manifests for deployment and automation and have **integrated Puppet with Jenkins** to fully deploy on to a Jenkins server to provide with continuous deployment and testing to automate deployment of infrastructure.
- Experienced in working with the **OpenShift Enterprise** which allows developers to quickly develop, host and scale applications in a self-manage cloud environment, also worked on the Deployment, Configuration, Monitoring and Maintenance of **OpenShift Container Platform**.
- Experience in **using Docker** including Docker Hub, Docker Engine, Docker images, Docker compose, Docker swarm, and Docker Registry and used containerization to make our applications platform to be consistent flexible when they are moved into different environments.
- Experience in **deploying Kubernetes Cluster on AWS and Azure** cloud environments with master architecture and wrote many **YAML files** to create many services like pods, deployments, auto-scaling, load balancers, labels, health checks, Namespaces, Config Map etc.
- Experience in **integrating Jenkins** with various tools like Maven (Build tool), Git (Repository), SonarQube (code verification), Nexus (Artifactory) and **implementing CI/CD automation** for creating Jenkins pipelines programmatically architecting Jenkins Clusters.

- Experience in **working on version control systems** like GIT and used Source code management client tools like Git Bash, GitHub, Git GUI and other command line applications.
- Experience in Branching, Merging, Tagging and maintaining the version across the environments using SCM tools like GIT and Bitbucket, Subversion (SVN) on **Linux platforms**.
- Experience in **Nagios** as a monitoring tool to identify and **resolve infrastructure** problems before they affect critical processes and worked on Nagios Event handlers in case of automatic restart of failed applications and services.
- Experience on **ELK architecture** and its implementation. Handled installation, administration and configuration of **ELK stack** on AWS and performed Log Analysis.
- Experience in **deploying and configuring** Elasticsearch, Log Stash, Kibana (ELK) and AWS Kinesis for log analytics and experienced in monitoring servers using Nagios, Splunk, CloudWatch.
- Experience in Group creation, monitoring and maintaining logs for system status/health using Linux commands and Splunk system monitor. Writing new plugins in **Splunk to monitor**.
- Worked on customizing Splunk dashboards, visualizations, configurations, reports and search capabilities using **customized Splunk queries**.
- Expert in writing scripts like **Ruby, Perl, Power Shell, JSON, Node.js, YAML, Groovy, Bash/Shell, Python** for automating the build and release process.
- Experience in Working with web servers such as Apache **HTTP** server, **NGINX**, Apache **TOMCAT**, application servers such as Oracle WebLogic 9.x/10.x, IBM WebSphere 6.x/7.x/8.x, JBoss 4.1.
- Knowledge of using Routed Protocols like **FTP, SFTP, SSH, HTTP, HTTPS** and Direct connect. And experience in **Kickstart** installations; support, configuration and maintenance of Red Hat Enterprise Linux, CentOS.
- Experience in system administration working on multiplatform VMware, LINUX (Red hat, SUSE), UNIX (Oracle Solaris 9/10) and windows server.
- Exposure to all aspects of **Software Development Life Cycle (SDLC)** such as Analysis, Planning, Development, Testing, Implementation, Post-production analysis of the projects.

Technical Skills:

Cloud Environment	AWS, GCP, Azure, OpenStack, Rackspace, Pivotal Cloud Foundry.
Configuration Management tools	Chef, Puppet, Ansible, Ansible Tower, Chef Automate
Build tools	Maven, Ant, Docker, MS Build, GRUNT.
Automation tools	Jenkins, Bamboo, Terraform, CloudFormation
Version Control tools	GIT, GIT-lab, TFS, Bitbucket, GitHub, Gutbucket, Subversion (SVN)
Operation systems	Sun-Solaris, Red Hat Linux, SUSE, Ubuntu, CentOS, Windows NT/2003/XP/2000, MacOS, UNIX
Web servers	Apache, Tomcat, JBOSS 4.x/5.x, Web Logic (8/9/10), Web Sphere4.0/5.0
Database System	MS SQL Server, MySQL, MongoDB, Oracle 9i/10g/12C, IBM DB2
Monitoring tools	Nagios, CloudWatch, Splunk, ELK-Xpack, GrayLog, Grafana, New Relics
Networking	DNS, DHCP, WAN, TCP/IP, NIS, NFS, SMTP, LAN, HTTP
Scripting	Python, Ruby, Bash shell, Power shell, JSON
Virtualization Technologies	VMware, Windows Hyper-V, Power VM, VirtualBox, Citrix Xen, Vagrant
Web Programming	HTML, CSS, XML, XSLT, jQuery

Role: Sr. Cloud & DevOps Engineer

- Creating and maintaining containerized **micro services and configuring/maintaining** private container registry on Microsoft Azure for Hosting Images and using Windows Active Directory. I am one of the lead DevOps Engineer and a cloud architect.
- Deployed and Maintained windows phone applications on **Azure cloud technologies**. Converted **.Net** application to Microsoft **Azure Cloud** Service Project as part of cloud deployment.
- Managed servers on the Microsoft **Azure** Platform **Azure** Virtual Machines instances using Ansible Configuration Management and created **Ansible Playbooks**, tasks and roles to automate system operations.
- Worked on **AZURE** (IaaS) migrating like creating AZURE VMs, storage accounts, VHDs, storage pools, migrating on premise servers to AZURE and creating availability sets in AZURE and performed Hardening of the VM's and disk encryption using the **KEK key** in **MS Azure**.
- Hands on experience on **using Terraform along with packer** to create custom machine images and automation tools like Chef/Ansible to install software's after the infrastructure is provisioned.
- Worked with **Terraform for automating** VPCs, ELBs, security groups, SQS queues, S3 buckets, and continuing to replace the rest of our infrastructure.
- Created **Chef Cookbooks** and wrote recipes in **Ruby Script** to install and configured Infrastructure across environments and automated the process using **Python Script**.
- Automated the **cloud deployment** using Chef and **ARM templates** for unattended bootstrapping in Azure.
- Created **Ansible roles** in **YAML** and defined tasks, variables, files, handlers and templates. configured the Ansible files for parallel deployment in Ansible for automating the Continuous delivery process and used Ansible for configuring and managing multi-node configuration management over **SSH and PowerShell**.
- Experience **using Ansible Tower dashboard**, role base access control, access to Ansible for deployments and worked with Ansible Playbooks to automate various deployment tasks and working knowledge on Ansible Roles, Ansible inventory files and Ansible Galaxy.
- Worked on active integration effort for building out **PaaS** with **RedHat OpenShift**, Dockers and working with developers on application containerization effort.
- Worked with **Docker and Kubernetes** on multiple cloud providers, from helping developers build and containerize their application (**CI/CD**) to deploying either on public or private cloud.
- Created, managed and performed **container-based deployments** using Docker images containing Middleware and Applications together and Evaluated Kubernetes for Docker container orchestration.
- Utilized **Kubernetes and Docker** for the runtime environment for the Continuous Integration/Continuous Deployment system to build, test, and deploy. Created Jenkins jobs to deploy applications to **Kubernetes Cluster**.
- Worked on creating the Docker containers, Docker images, tagging and pushing the images and Docker consoles for managing the application life cycle and Deployed Docker Engines in Virtualized Platforms for containerization of **multiple applications**.
- Used **Jenkins and pipelines** to drive all microservices builds out to the Docker registry and then deployed to Kubernetes.
- Integrated **GIT into Jenkins** to automate the code check-out process used Jenkins for automating Builds and Automating Deployments. Excellent hands on Experience in several areas of **Jenkins** like master/slave administrations, access controls, report generations, parameterized/triggered build setups etc.
- **Tested Splunk** search strings & operational strings and used it as resource monitoring tool. Worked with administrators to ensure Splunk is actively and accurately running and monitoring on the current infrastructure implementation.
- Excellent hands on experience working with **monitoring tools** such as Nagios, Splunk, ELK and working with load balancing, Integrating and monitoring with Nagios and Splunk also checking the health of applications.
- Developed **PowerShell script** to fetch necessary information from webpages according to the requirement and to automate routine tasks when applicable.
- Expertise in administering and automating operations across multiple platforms and Windows servers, Performed numerous server migrations on both **Linux/Unix**. Migrations include moving all clients and their data, configuration settings, testing and verifying everything is correct with zero downtime.

Environment: Azure, Terraform, Chef, Ansible, OpenShift, Docker, Kubernetes, Jenkins, Git, Maven, Splunk, Nagios, Python Scripts, Kickstart, Java/J2EE, Linux.

Role: Sr. Cloud & AWS Engineer

Client: Capital One, VA, USA
2018

January 2017 to March

- Created **AWS CloudFormation Templates** to create custom-sized VPC, subnets, EC2 instances, ELB, security groups. Managed other AWS Services like S3, Cloud Front, Cloud Watch, RDS, Kinesis, Redshift Cluster, Route53, SNS, SQS, Cloud Trail.
- **Implemented AWS** solutions using S3, RDS, EBS, Elastic Load Balancer, and Auto-scaling groups, Optimized volumes and EC2 instances and Using Jenkins AWS Code Deploy plugin to deploy to AWS.
- Worked with **AWS CLI and AWS API** to manage resources on AWS for many services such as EC2, S3, VPC, Cloud Watch, ELB, Auto-scaling, created python script using AWS API Calls to manage all resources **deployed on AWS**.
- Adding Compute nodes into **OpenStack cloud platform**. Responsible for supporting and maintaining **OpenStack** in a production environment.
- Troubleshooted lifecycle services within the **OpenStack** including log files, message queues, database, Compute hardware, and network connectivity.
- Created custom machine images and automation tools like Chef/Ansible **using Terraform** along with packer to install software's after the infrastructure is provisioned.
- Involved in **working with Terraform** to bring up a count of 'container instances' or 'nodes' in an **AWS ECS cluster** with different instances running on each one.
- Experience with setting up Chef Infra, bootstrapping nodes, creating and uploading recipes, node convergence in **Chef SCM**.
- Created **Chef Cookbooks** and wrote recipes in **Ruby Script** to install and configured Infrastructure across environments and automated the process using **Python Script**.
- Installed and **Implemented Ansible** configuration management system. Used Ansible to manage Web applications, Environments configuration Files, Users, Mount points and Packages.
- Configured EC2 Instances for **RedHat OpenShift** nodes with EBS block storage for persistent volumes, and S3 buckets for **OpenShift** registries along with snapshots for backups.
- Deployed **OpenShift Enterprise v3.4/3.6** on **RedHat 7** environment and integration with private Docker Registry.
- Experience with **Container based deployments** using Docker, working with Docker images, Docker Hub and Docker-registries and Kubernetes.
- Developed procedures to unify streamline and automate applications development and deployment procedures with Linux container technology using **Docker swarm and Docker compose**.
- Worked on implementing microservices on **Kubernetes Cluster** and Configured Operators on Kubernetes applications and all its components, such as Deployments, Config Maps, Secrets and Services.
- Configured and administered Jenkins for automated builds and Responsible for installing **Jenkins master** and slave nodes and maintenance of build pipeline.
- Configuration of various **plugins for Jenkins** for automation of the workflow and to optimize and smooth running of build jobs.
- Managed Git repository, code merging, production deployments and analyzed and resolved conflicts related to merging of source code for Git.
- Worked with **MAVEN** as a build tools on java projects for the development of build artifacts on the source code. Maintained build related scripts developed in shell for Maven builds, created and modified build configuration files including **POM.xml**.
- Responsible for log monitoring, auditing and enforcement of policies using **New Relic** Monitoring AWS Instances regularly using ops view and New Relic tools.
- Configuring and managing **ELK stack**, setup the elastic search ELK Stack to collect search and analyze log files from across the servers and integration of Application with monitoring tool **New Relic** for complete insight and proactive monitoring.
- Created **Python scripts** to totally automate AWS services which includes web servers, ELB, CloudFront distribution, database, EC2 and database security groups, S3 bucket and application configuration, this script creates stacks, single servers, or joins web servers to stacks.
- Experience in administering and maintaining Linux servers in production environments. Supported in the installation of packages/patches on Linux platforms. Implemented Backup & Disaster recovery management on Linux platforms.

Environment: AWS, OpenStack, Terraform, Chef, Ansible, OpenShift, Kubernetes, Docker, Jenkins, Maven, Git, Python/Shell/Perl/Ruby/PHP Scripts, Linux, ELK, New Relic, VMware, Tomcat Apache, JIRA, web & application servers, Networking.

Role: DevOps Engineer

Client: HDFC Bank, Hyderabad, India
2016

April 2015 to December

- Expertise on Writing Templates for AWS **infrastructure as code using Terraform** to build staging and production environments and for deploying into AWS used automation pipeline tools like Jenkins, Artifactory, Chef and Terraform.
- Configured Active Directory accounts to single sign-on to **AWS Management Console**. Worked with security groups for EC2 instances along with ELB and Roles for Amazon services to interact with each other.
- Migrated MySQL, ORACLE databases from on-premises to AWS, Created snapshots and Amazon Machine Images of EC2 Instances as a part of backups. **Configured AWS ELB** for providing High-Availability to applications across multiple availability zones by performing periodic health checks.
- Experience in Working on **Chef with Knife** commands to manage Nodes, Cookbooks, Chef Recipes, Chef attributes, Chef Templates. Extensively used Ruby scripting on Chef Automation for creating cookbooks comprising all resources, Database, templates, attributes.
- Written **multiple cookbooks** in Chef using Ruby scripting language for various DB configurations to modularize and optimize end-product configuration, converting production support scripts to Chef Recipes.
- Configured **Ansible control machine** and wrote Ansible playbooks with Ansible roles. Used file module in Ansible playbook to copy and remove files on EC2 instances.
- Created Ansible roles in **YAML** and defined tasks, variables, files, handlers and templates. Created inventory and configured the Ansible files for parallel deployment in Ansible for automating the Continuous delivery process.
- Experienced in **Docker, Kubernetes** and **OpenShift** to manage micro services for development of continuous integration and continuous delivery.
- Experienced in writing **Chef Cookbooks** and Recipes to automate our build/deployment process and do an overall process improvement to any manual processes and managed servers on AWS cloud platform using chef configuration management tools and Server automation with Chef and used tools like Maven for deployment and build management.
- Extensively worked on **Puppet** apply configuration and developing multiple new puppet modules with heir for all dev, and prod environments.
- Administration of **Bamboo** Implemented a Continuous delivery framework using bamboo chef, Maven in Linux Environment. Experienced in migrate project from Bamboo to Jenkins.
- Extensively worked on Jenkins/Hudson, Bamboo and TeamCity for **Continuous Integration** and strong experience with integration of **Ant and Maven** Build as build tools for the building of deployable artifacts (jar, war & ear) from source code.
- Used Atlassian tools **JIRA**, Confluence, Bitbucket, Bamboo for defect management, team collaboration, source code management and continuous integration and deployment practices.
- Experience with design, configuration and implementation of Nagios and monitored run scripts remotely via Nagios Remote Plugin Executor.
- Designed the Branching/Merging strategy for all Lobs and to have unique **Build/release** strategy across platform.
- Created post commit and pre-push hooks using Python in SVN and GIT repos. Setting up the SVN and GIT repos for Jenkins; build jobs.
- Developed **Python and Shell scripts** for automation of the build and release process. Scripting in multiple languages on Bash, Shell scripting, python scripting etc. Wrote automation scripts in shell and python to enhance the **CI-CD pipeline**.
- Installed, monitored and configured Applications in Nginx and Apache Tomcat Server and establish connectivity to databases and troubleshoot issues on the fly.
- Involved in setting up **JIRA** as defect tracking system and configured various workflows, customizations and plugins for the JIRA bug/issue tracker.
- Also, as Linux System & Middleware Administrator responsible for the day to day administration and administration of RHEL 5, 6/ CentOS which includes installation, testing, tuning, upgrading and loading patches, troubleshooting.

Environment: Puppet, Chef, GIT, Bamboo, Ansible, OpenShift AWS, ANT, Maven, JIRA, Python, PowerShell, Bitbucket, Nagios, Web & application servers, Networking, Linux

Role: Build & release Engineer

Client: Mphasis, Hyderabad, India
2015

April 2013 to March

- Responsible for the management and **continuous improvement** of the release process for internal and external web applications.
- Developed and **implemented Software** Release Management strategies for various applications according to the Agile process.
- Collaborated with Architects, Systems, Network, Software and QA Engineers, and to continuously improve the efficiency and reliability of **Build and Deployment** processes to support all phases of development including production releases.
- Troubleshooting, event inspection and reporting of various **Puppet issues** and starting/restarting of Puppet enterprise services.
- Managed Puppet classes, resources, packages, nodes and other common tasks **using Puppet console** dashboard and live management.
- Wrote Puppet manifests for deploying, configuring, install shield and managing collected for metric collection and monitoring.
- Constructed the **Puppet modules** for continuous deployment and worked on Bamboo for continuous integration, Wrote Puppet models for installing and managing java versions.
- Worked in all areas of **Jenkins** setting up CI for new branches, build automation, plug-in management and securing Jenkins and setting up master.
- Automated the bundling process and reduced all the manual intervention needed and merged that to the Jenkins job.
- Deployed applications using **Jenkins server** and Troubleshoot build & release job failures, resolve, work with developers on the resolution.
- Integrated with **leading CI servers** and kept builds reproducible with exhaustive build information to track and protect all artifacts used by your CI build using Binary Repository Manager/ Nexus Build System.
- Extensively used **ANT** tool to do the builds and integrated with Bamboo for the builds as the continuous integration process.
- Repository management in ANT to share snapshots and releases of internal projects using Nexus tool.
- Used LAMP (Linux, Apache, MySQL, PHP) stack in building some of the applications in Linux especially RedHat.

Environment: Linux, Perl, Puppet, Bamboo, Nagios, PHP, Python, Ruby, Jenkins, Vagrant, SVN, Bash, Nexus, PowerShell, NT Command Shell.

Role: Linux Administrator

Client: Mavin Infotech Pvt. Ltd., Hyderabad, India
2013

January 2012 to March

- Managed and administrated of all **UNIX** servers, includes Linux operating systems by applying relative patches and packages at regular maintenance periods using **Red Hat** Satellite server, YUM, RPM tools.
- Prepare specs for new infrastructure and **VMware servers**, disk storage, and network switches, routers, firewalls, and VPN.
- Planned and performed the **upgrades to Linux** (RHEL 5x, 6x, SUSE 10, 11, CENTOS 5, 6) operating systems and hardware maintenance like changing memory modules, replacing disk drives.
- Handling NFS, Auto Mount, DNS, LDAP related issues. **Install and configure** DHCP, DNS (BIND, MS), web (Apache, IIS), mail (SMTP, IMAP, POP3), and file servers on **Linux servers**.
- Monitoring CPU, memory, physical disk, Hardware and Software RAID, multipath, file systems, network using the tools **NAGIOS** 4.0 monitoring.
- **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.
- Design, build, and maintain production servers and **RAID** storage system.

Environment: UNIX, RedHat Satellite Server, NFS, Auto Mount, DNS, Tomcat, NAGIOS4.0, Java, RDBMS.