A picture containing drawing

Description automatically generated****Madhavi Kothapeta

Phone:(414)215-9767

email: madhavikdevops@gmail.com

**PROFESSIONAL SUMMARY:**

Professional Amazon Web Services (AWS) Solution Architect with 8 years of IT Experience and ability to accomplish all aspects of the software configuration management (SCM) process, systems deployment engineering (SDE), Azure, AWS, GCP and DevOps in CI/CD pipeline, Build/Release management.

* Expertise in DevOps, Configuration Management, Cloud Infrastructure, End-to End Automation which includes Azure, Amazon Web Services, Jenkins, Maven, GitHub, Ant, SonarQube, Ansible, Chef, Tomcat, JBoss, and Linux.
* Experience in migrating On-premises infrastructure to cloud platforms like AWS/Azure and involved in virtualization using (VMware), Open Stacks and infrastructure orchestration using containerization technologies like Docker and Kubernetes.
* Highly proficient in segregating the Azure services as part of sprint planning and preparing the hardening checklist for each Azure services. Creating new Azure ARM templates and artifacts to update the existing PAAS services.
* Experience in Designing and implementing Microsoft Azure Solutions across a range of cloud models like SaaS, PaaS, IaaS, and integrated on-premises, on-demand workloads with the Azure public cloud.
* Best practice in managing Azure infrastructure, Azure storage accounts and deploying workloads on Azure virtual machines (VMs), virtual networks, cloud services, resource groups, express route, traffic manager, VPN, load balancing, application gateways, auto-scaling and cloud services into secure V-Nets and subnets.
* Experience in migrating the Legacy application into GCP platform and managing the GCP services.
* Experience in AWS cloud computing platform, that includes various resources like EC2, load-balancing with ELB, messaging with SQS, Custom monitoring analysis using CloudWatch, Autoscaling architectures and using EBS under high I/O requirements.
* Build servers using AWS includes importing necessary volumes, launching EC2 instance, S3 for object static web pages and created security groups, auto scaling, load balancer, Route 53, and SNS as per the architecture using Infrastructure As A Code (IAAC) tools like Cloud formation JSON templates
* Experience with containerization and clustering technologies like Docker, Docker Swarm and Kubernetes.
* Experience in setting up of Docker and creating new images and getting images from Docker Hub, worked on Docker images and containers for deploying applications.
* Extensive experience in implementing a production ready, load balanced, highly available, fault tolerant, auto scaling Kubernetes Infrastructure and Microservice Container Orchestration.
* Experience in configuring and managing Chef master server, upload cookbooks through knife, test recipes in Kitchen and other chef tools like Supermarket, Inspect and building workflows with Chef Automate.
* Experience in Designing, Installing, and Implementing Ansible configuration management system and in writing playbooks for Ansible deploying applications and maintained role-based access control by using Ansible Tower to manage web applications, Environments configuration files, Users and Packages.
* Proficient in Writing Terraform templates, Chef Cookbooks, recipes and pushed them onto Chef Server for configuring EC2 Instances. Used Terraform to map more complex dependencies and identify network issue.
* Experience in Installing and configuring Continuous Integration and Continuous Delivery application JENKINS. Proficient in defining build pipelines in addition to creating and maintaining multiple jobs.
* Worked in an agile development team to deliver an end-to-end continuous integration/continuous delivery product in an open-source environment using tools like Jenkins, VSTS.
* Experience in using Nexus and Artifactory Repository Managers for Maven builds and used Maven dependency management to deploy snapshot and release artifacts to Nexus to share artifacts across projects.
* Implemented Terraform modules for deployment of various applications across multiple cloud providers.
* Experience with built Elastic search, Log stash and Kibana (ELK) for centralized logging and then store logs and metrics into S3 bucket using Lambda function for more than 2 weeks.
* Deployed and configured Elastic search ELK, Logstash and Kibana (ELK) for log analytics, full text search, application monitoring in integration with AWS Lambda and Cloud Watch.
* Experience in using Application Performance Monitoring tools like Datadog, Splunk, Nagios and resolved network related issues.
* Worked with build tools like MAVEN and ANT for the building of deployable artifacts
* Excellent skills in Unix Shell/Perl/Python scripting and good C/Java programming experiences.
* Extensive experience in setup, configuration, upgrade, maintenance, performance monitoring and troubleshooting on different UNIX platforms like Linux, VMWARE and system software and hardware.
* Administered various flavors of Linux (RHEL, CentOS, Ubuntu, Solaris, Ubuntu, Fedora) and worked on Logical Volume Manager (LVM), Kickstart, Bonding, LAMP and LDAP.

**DevOps & Cloud Skills:**

|  |  |
| --- | --- |
| **CI/CD** | Jenkins, VSTS, GitHub/Bitbucket, Maven, SonarQube, Nexus OSS, Bamboo, ANT, Confluence, JIRA. |
| **Cloud Platforms** | Amazon Web services, Azure, Open stack, Open shift, PCF |
| **Microservices** | Docker, Kubernetes, AWS ECS |
| **Logging and Alerting** | ELK stack, Splunk, Cloud Watch, SNS |
| **Distributed Messaging Platform** | KAFKA |
| **Infrastructure Automation** | Ansible, Terraform, Chef |
| **Test Automation** | Junit, Nunit, Selenium |
| **Application Servers** | Apache Tomcat, JBOSS, Web Logic, Web Sphere, RHEL. |
| **Web Servers** | Nginx, Apache HTTP |
| **Operating Systems** | Windows, Linux, CentOS, Ubuntu, |
| **Databases** | Oracle 10g/11g/12c, Mongo DB, MySQL |
| **Scripting** | Python, Shell, PowerShell, Ruby, JavaScript, C, C++, SQL, .NET, Objective C, Java/J2EE. |
| **SDLC** | Agile, Scrum Waterfall Methodologies. |
| **Web Technologies** | Servlets, JDBC, JSP, HTML, Java Script, XML, JSON. |
| **Bug Tracker & Testing Tools** | JIRA, Bugzilla, Remedy, Junit, IBM Clear, Quest, Find bug Static |

**PROFESSIONAL EXPERIENCE:**

**Client: SiriusXM, Irving, TX. JAN022– Tilldate**

**Role: DevOps/Aws Engineer**

**Responsibilities:**

* Involved in projects that move to production and work closely with the Development, Quality Assurance and Management teams to ensure cross communication and confirmed approval of all production changes
* Implemented automation of Builds and Release management using Jenkins to achieve CI/CD in a project.
* Actively manage, improve, and monitor cloud infrastructure on AWS, EC2, S3, and RDS, including backups, patches, and scaling.
* Worked with Jenkins APIs to know various things like build status, count of builds, Git commit version used by Jenkins builds etc.
* Written Bash shell scripts for getting information about various Linux servers and prepared Ruby codes, programming of web applications and testing services on daily basis.
* Installed and configured Jenkins for continuous integration and performed continuous deployments
* Worked on JIRA for tracking and updating the JIRA tickets and per assigned and Maintained JIRA Administration/User documentation in Confluence.
* Built end to end CI/CD Pipelines in Jenkins to retrieve code, compile applications, perform tests and push build artifacts to Nexus.
* Organized and Coordinated Product Releases work closely with product development, QA, Support across global locations to ensure successful releases.
* Working on AppDynamics and Dynatrace tools, Identifying the critical applications for system resource utilization (CPU, Memory, threads etc..) and JVM heap size was monitored using AppDynamics.
* Working on creating and implementing application monitoring, and logging strategies using tools like New Relic, Splunk, OpsGenie and Cloud tools like AWS monitoring suite.
* Worked in AWS environment, instrumental in utilizing Compute Services (EC2, ELB), Storage Services (S3, Elastic Block Storage), Elastic Beanstalk, VPC, SNS, IAM and Cloud Watch.
* Implemented a POC to use the DevOps tools offered by AWS to create a CI/CD pipeline in AWS, using Code Pipeline, Opsworks, Code Build, Code Deploy and AWS S3/Bitbucket.
* Provided security and managed user access and quota using AWS Identity and Access Management (IAM), including creating new Policies for user management.
* Designed AWS Cloud Formation templates to create custom sized VPC, Subnets to ensure successful deployment of Web applications and database templates.
* Created EBS volumes to store persistent data and mitigate failure by using snapshots. Performed Data Back-up of Amazon EBS volumes to S3 by taking point-in-time snapshots.

**Environment**: AWS, EC2, EBS, R53, CloudFormation, Jenkins, Apache, Tomcat opsgenie, ServiceNow, Atlassian, NEXUS, Oracle, DB2 MS SQL Server, Java, J2EE, Ruby, Shell, Windows, Linux

**Role: Sr. Azure / Cloud Operations Engineer and Infrastructure**

**Client: Signify Health LLC, Dallas, TX September 2020 - Dec 2021**

**Responsibilities:**

Signify needed specific help with the Ansible backlog. This role was funded for Q4 2020 to help get the backlog under control.

* Experience in Designing and implementing Microsoft Azure Solutions across a range of cloud models like SaaS, PaaS, IaaS, and integrated on-premises, on-demand workloads with the Azure public cloud.
* Best practice in managing Azure infrastructure, Azure storage accounts and deploying workloads on Azure virtual machines (VMs), virtual networks, cloud services, resource groups, express route, traffic manager, VPN, load balancing, application gateways, auto-scaling and cloud services into secure V-Nets and subnets.
* Written Power Shell scripts for archiving and moving of older log files to Azure Storage and automation scripts using python.
* Working on application migrations to Azure (more experience in industry and cloud in general).
* Working on migrating databases or infrastructure and working with Azure ARM templates.
* Working with Terraform and Infrastructure as Code (IaC).
* Working on tomcat WebLogic Azure DevOps also working with AKS.
* Working on DNS, Routing protocols, TCP/UDP protocols.
* Working as cloud Engineer, involved in configuration for Web apps/Function apps, V-net integration, HCM, Application gateway, App Insights, Active directory, Azure Key Vault, Encryption and Security on Azure.
* Configured and implemented storage blobs and Azure files - Created Storage accounts, Configured the Content Delivery Network (CDN), custom domain, Managing access and storage access key.
* Automated setting up server infrastructure for the DevOps services, using Puppet/Ansible, shell and python scripts.
* Part of a team of DevOps engineer for infrastructure support on Azure and GCP cloud.
* Monitoring using Ansible playbooks and has integrated Ansible with Run deck and Jenkins.
* Strong experience on Linux/Unix, Ruby, python scripting. Working on removal of orphaned snapshots in AWS with the python script.
* Wrote and maintained various Ansible modules for the upstream Ansible repository.
* Working on Ansible playbooks to direct Linux syslog’s from Sumo logic to Netsurion within the Dev Integrated, QA, Stage, PROD environments.
* Working on TechOps production tickets assigned by the customers and troubleshooting them in the working sessions.
* Working on sync issue between ldap servers, also installing opsgenie heartbeat on prod servers by using ansible automation.

**Environment:** Azure, Ansible, Kubernetes, Docker, Jenkins, Bamboo, GIT, Bitbucket, Chef, Maven, New relic, Sumo logic, Netsurion, SonarQube, Python, Power Shell, Ruby, UNIX, Windows/Linux, Terraform, Power Shell, Windows/Linux, Jenkins, Groovy, GIT, Nginx, Nexus OSS, SonarQube, ELK, Apache Tomcat, AEM / Angular or React a plus, HAProxy, Akamai, Oracle Web Commerce ATG, eCommerce Python, B2C/AD/APIM, Core MVC, ASP .NET.

**Client: AT&T (Richardson, TX) NOV 2018 – Aug2020**

**Role: DevOps Engineer /Site Reliability Engineer**

**Responsibilities:**

* Working as cloud Engineer, involved in configuration for Web apps/Function apps, V-net integration, HCM, Application gateway, App Insights, Active directory, Azure Key Vault, Encryption and Security on Azure.
* Configured and implemented storage blobs and Azure files - Created Storage accounts, Configured the Content Delivery Network (CDN), custom domain, Managing access and storage access key
* Experience in Windows Azure Services like PaaS, IaaS and worked on storages like Blob (Page and Block), Sql Azure. Well experienced in deployment & configuration management and Virtualization.
* Part of a team of DevOps engineer for infrastructure support on Azure and GCP cloud.
* Worked on various Azure services like Compute (Web Roles, Worker Roles), Azure Websites, Caching, SQL Azure NoSQL, Storage, Network services, Azure Active Directory, API Management, Scheduling, Auto Scaling, and PowerShell Automation.
* Automated the infrastructure in Google Cloud by using Deployment Manager templates for various services in GCP.
* Developed microservice on boarding tools leveraging Python and Jenkins allowing for easy creation and maintenance of build jobs and Kubernetes deploy and services.
* G reproducible builds of the Kubernetes applications, managed Kubernetes manifest files and Helm packages and implemented Kubernetes to deploy scale, load balance, scale and manage Docker containers with multiple namespace versions.
* Experience on Vagrant, Azure and Kubernetes based container deployments to create self-environments for dev teams and containerization of environments delivery for releases.
* Used of Docker, Kubernetes, and Open Shift to manage micro services for development of continuous integration and continuous delivery.
* Worked on creating the Docker containers and Docker consoles for managing the application lifecycle. Worked on various Docker components like Docker Engine, Hub, Machine, Compose and Docker Registry.
* Focused on containerization and immutable infrastructure. Docker has been core to this experience, along with Kubernetes. Experienced in using Docker Swarm and deployed spring boot applications. Deployed Docker Engines in Virtualized Platforms for containerization of multiple apps.
* Created Docker images from scratch and customized and modified base images from existing environment configurations and maintaining the image repository for development teams.
* 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
* Experience in managing Ansible Playbooks with Ansible roles. Used file module in Ansible playbook to copy and remove files on remote systems. Created inventory in Ansible for automating the continuous deployment.
* Used Terraform for building, changing, versioning infrastructure and collaborate the automation of Azure Infrastructure via Terraform and Jenkins.
* Built the process of remediation for Azure resources, by automating using JSON Templates and PowerShell scripts and deploy it using build and release pipeline in VSTS.
* Worked on setting up Splunk to capture and analyze logs from various layers such as Load Balancers, Web servers and application servers.
* Used Splunk to monitor the system logs as well as notify the incident management system upon exceeding thresholds.
* Creating scripts in DSL Groovy which integrate with Jenkins for Automation to create seed jobs.
* Managed SVN repositories for branching, merging, and tagging and developing Shell/Groovy Scripts for automation purpose.
* Extensive experience in using Groovy, Maven and ANT as a Build Tool for the building of deployable artifacts (war & ear) from source code.
* Advanced web development using an MVC framework such as React or AngularJS highly desirable
* Used Spring Kafka API calls to process the messages smoothly on Kafka Cluster setup.
* Coordinate/assist developers with establishing and applying appropriate branching, labeling/naming conventions using GIT source control and analyze and resolve conflicts related to merging of source code for GIT.
* Experience with monitoring/content delivery tools such as Fog light or Akamai, Hap Roxy.
* Maintained JIRA for tracking and updating project defects and tasks ensuring the successful completion of tasks in sprint.

**Environment:** Azure, Kubernetes, Docker, Terraform, Jenkins, Groovy, GIT, Ansible, Maven, Nginx, Nexus OSS, SonarQube, ELK, Apache Tomcat, AEM / Angular or React a plus, HAProxy, Akamai,Oracle Web Commerce ATG, eCommerce Python, B2C/AD/APIM, Core MVC, ASP .NET, Power Shell, Windows/Linux, IBM Security management, LDAP, Nagios, Q radar, Splunk, Kafka clusters.

**Client: First data corporation (Marietta, GA) Nov 2017– Oct 2018**

**Role: Azure Engineer/DevOps Engineer**

**Responsibilities:**

* Implemented AWS solutions using EC2, S3, RDS, IAM, Redshift, Lambda, Security Groups, EBS, Elastic Load Balancer, Auto scaling groups, SNS, Optimized volumes and Cloud Formation templates.
* Designed, configured, and managed public/private cloud infrastructures utilizing Amazon Web Services (AWS), including EC2, Virtual Private Cloud (VPC), Public and Private Subnets, Security Groups, Route Tables, Elastic Load Balancer, Cloud Watch and IAM.
* Implemented AWS high availability using AWS Elastic Load Balancing (ELB), which performed a balance across instances in multiple Availability Zones.
* Setup and build AWS infrastructure various resources like VPC, EC2, S3, IAM, EBS, Security Group, Auto Scaling, and RDS in Cloud Formation JSON template
* 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.
* Automated OpenStack and AWS deployment using Cloud Formation, Ansible and Terraform, also deployed, and administered Openstack services.
* Worked on Terraform for deploying infrastructure in AWS as per the requirement.
* Involved in using Terraform migrate legacy and monolithic systems to Amazon Web Services and provisioned the highly available EC2 Instances using Terraform and cloud formation and wrote new plugins to support new functionality in Terraform.
* Worked on Docked-Compose, Docker-Machine to create Docker containers for testing applications in the QA environment and automated the deployments, scaling and management of containerized applications across clusters of hosts.
* Built Openstack based infrastructure for Database as a service (DBaaS) and Load Balancer as a service (LBaaS).
* Worked with Docker on multiple cloud providers, from helping developers build and containerize their application (CI/CD) to deploying either on public or private cloud.
* Played a major role in building Docker images; create build and deployment configurations to deploy applications on OpenShift. Developed Ansible playbooks to do automated recovery process upon the failure of OpenShift MASTER.
* Developed Chef Cookbooks to manage system configuration and for Tomcat, MySQL, Windows applications and versioned them on GIT repositories and Chef Server.
* Worked with CHEF Enterprise Hosted as well as On-Premises, Installed Workstation, Bootstrapped Nodes, Wrote Recipes and Cookbooks & uploaded them to CHEF-server, Managed On-site OS/Applications/Services/Packages using CHEF.
* Wrote Kafka producers to stream the data from external rest APIs to Kafka topics.
* Designed and implemented by configuring Topics in new Kafka cluster in all environment and Integrated Apache Kafka for data ingestion.
* Provide expertise and hands on experience on custom connectors using the Kafka core concepts and API.
* Involved in setting up builds using Chef as a configuration management tool and managed the configurations of servers using Chef, configured Jenkins builds for continuous integration and delivery for deployment and implementation of Chef for infrastructure as code initiative.
* Used Elasticsearch, Logstash and Kibana (ELK) for maintaining system Logs and Bugzilla for tracking code bugs.
* Maintained ELK (Elastic Search, Log stash, Kibana) Stack for Searching, routing and visualizing Logged Data.
* Involved in supporting cloud instances running Linux and Windows on AWS, experience with Elastic IP, Security Groups and Virtual Private Cloud in AWS.
* Used tracking tool JIRA and triaged the issues and maintained bugs using JIRA tool. Maintained JIRA for tracking and updating project defects and tasks ensuring the successful completion of tasks in sprint.
* Developed Shell and Perl Scripts for the purpose of manual deployment of the code to the different environments and e-mail the team when the build is completed.
* Troubleshooting the network issues involving TCP/IP, LAN/WAN networking, DNS, DHCP, SMTP, SNMP, netstat and monitored the servers and Linux scripts regularly and performed troubleshooting.

**Environment:** Amazon Web Services (AWS), chef, Docker, Jenkins, Maven, Kafka, Openstack, Terraform, Ansible, ELK, Tomcat, Shell, WebLogic, JIRA, GIT, Python, Azure, Linux.

**Client: BCBS (Chicago, IL) Jan 2017 – NOV 2017**

**Role: Devops Engineer/ Site Reliability Engineer**

**Responsibilities:**

* Responsible for implementing and maintaining the branching and Build/Release strategies using subversion.
* Worked on several build automation tools like ANT, Maven and Build Forge.
* Involved in troubleshooting the problems that are created while building and deployment.
* Worked on debugged performance issues with Maven scripts and helped improve the build process.
* Worked on database automation version for MySQL and Oracle DB.
* Worked on installing and configuring the routing type and route in web servers.
* Managed and optimized the continuous delivery tools like Jenkins.
* Experience of doing Cassandra upgrades to Major & latest versions.
* Worked on creating Virtual Machines and managing it on windows OS and building communication using Virtual   
  Machine Migration from different hosts.
* Maintained the migration logs for every release and data accuracy and planned the next release schedules   
  accordingly.
* Used Apache Tomcat as application server for deploying artifacts.
* Worked on script to rebalance Kafka topics in an automated fashion using ruby and Kafka binaries.
* Worked on automating the build process using GIT, ANT and Subversion.
* Worked with Apache, HTTP, Ngnix server including proxy and caching configurations.
* Experience in creating in Chef Architecture by using workstations, nodes, and servers.
* Worked on various application servers like Tomcat/WebSphere Application Servers.
* Setup and administration of JIRA with required scripting and customizations.
* Implemented high availability using portal, PowerShell on Azure Resource manager Deployment models.
* Responsible for coordinating the project from development to production and communicating with the   
  developers and testers and Data Base team for successful release.

**Environment:** AWS, ANT, Maven, Subversion, HTML, MySQL, Cassandra, Kafka, Oracle DB, Ngnix, Tomcat, Splunk, GIT, SVN.

**Client: Bytrix Solutions Chennai, INDIA June 2014– Dec 2015**

**Role: Jr. Linux / Unix Administrator**

**Responsibilities:**

* Installed, upgraded and configuration of Red Hat Linux using the kick start installation.
* Responsible for creating builds, Staging, and deploying Software Content across multiple environments (DEV, QA, Demo, Test, Staging, UAT and Production)
* Configuring and Maintained DNS servers, Mail servers, FTP servers, NFS, NIS, RPM.
* Scheduled Jobs using CRONTAB and AT Utility and wrote shell scripts to automate System Process.
* Develop, maintain, and upgrade existing UNIX Shell scripts to customize daily work.
* Performed daily system administration tasks like managing system resources, writing scripts, LVM management and end users support, manage operations and security issues
* Designed and worked with team to implement ELK to provide end-end search for visualization to investigate log files.
* Developed various bash shell scripts to automate resource, job monitoring and alerting.
* Created RPM packages using the RPMBUILD and checking the new build packages.
* Remote system administration using tools like SSH, Telnet, and Rlogin.
* Participated in setup Storage Area Network (SAN) and NAS and file system backup and restore.
* Worked on Installation, Configuration and administration of DNS, LDAP, NFS, NIS on REDHAT Linux/Debian Servers. Configured and managed ESX VM’s with the virtual center and VI clients.
* Configuring the services for sharing the resources from Unix such as remote login through TELNET, FTP, SSH, SFTP, SCP.
* Involved in setting up accounting systems and performing ongoing system with the administrative tasks. Extensive user and group management through shell scripting.
* Solid network and systems troubleshooting experience with HTTP\HTTPS, SFTP, FTP, NFS, SMB, SMTP, SSH, NTP and TCP/IP, Internet Security, encryption.
* Managing systems routine backup, scheduling jobs like disabling and enabling cron jobs, enabling system logging, network logging of servers for maintenance, performance tuning, testing.
* Conduct day-to-day tasks in RHEL that included upgrading rpms, kernel, HBA driver, configuring SAN Disks, multipathing and LVM file system.
* Working on Volume management, Disk Management, software RAID solutions using VERITAS Volume manager & Solaris Volume Manager.
* Implementing Kickstart configuration for automating Linux installations
* Troubleshooting Linux network, security related issues, capturing packets using tools such as Iptables, firewall, TCP wrappers, NMAP.

**Environment:** Kickstart, Linux, LVM, LAMP, Tomcat, Jira, Confluence, VM Ware, Oracle, MySQL, Red hat, Yum, RPM, Putty, DNS server, ELK, Cron-tab, Unix, Nagios, Sun Solaris, VM Ware, Shell scripts.

**Education:**

* Bachelor’s in computer science From Osmania University Hyderabad, India. -2014
* Master of Information Technology Management- California state university long beach, CA-2017.