**RAVI KANTH**

**Sr. Cloud DevOps/System Engineer**

Sr. Cloud DevOps Engineer/Administrator with 10 plus years of experience in Control, Build and Release management, Change management, Cloud Integration and Deployment. Well versed with deadline pressures, superior analytical, time- management, collaboration, communication and problem-solving skills.

**Summary:**

* **Total 10 plus years of experience** in IT industry with major work on **DevOps**, Release Engineering, Configuration Management, Continuous Integration and Continuous Delivery methodologies, VMWare, **Build/Deploy/Release** Management, Containerization, **Amazon Web Services (AWS), GCP, Azure, Cloud** Infrastructure.
* Expert in compilation, packaging, building, and debugging, automating, managing, tuning and deploying code across multiple environments.
* Experience in Designing, Architecting and implementing scalable cloud-based web applications using **AWS, GCP and Azure.**
* Knowledge and experience in all Phases of Software Development Life Cycle (SDLC), Software Configuration Management (**SCM**), Continuous **Integration (CI), Continuous Deployment (CD) and Release Management.**
* Experience with Amazon Web Services Creating, configuring and **Managing EC2, EBS, S3, ELB, Cloud watch, SNS, RDS, Auto Scaling, VPC, AMI, AWS Lambda, IAM,** **Fargate** services across AWS Zone.
* Designed highly available, cost effective and fault tolerant systems using multiple **EC2** instances, Auto Scaling, Elastic Load Balance and AMIs.
* Expertise in Architecting and Implementing on Google Cloud Platform (**GCP**) services like **App Engine, Compute Engine, Kubernetes Engine, Cloud Functions, Cloud Run, Cloud KMS, Datastore, Firestore, Storage, Cloud SQL, Spanner, Pub/Sub, Data Flow, BigQuery, Stackdriver, Monitoring, Load Balancing,** and **Cloud Armor.**
* Experience in Azure services, such as **Azure cloud services, Azure storage, IIS, Azure Active Directory (AD), Azure Resource Manager (ARM), Azure Storage, Azure, Blob Storage, Azure VMs, SQL Database, Azure Functions, Azure Service Fabric, Azure Monitor, and Azure Service Bus.**
* Expertise in **Azure Scalability and Azure Availability** - Build VMs availability sets using the Azure portal to provide resiliency for **IaaS** based solution and Virtual Machine Scale Sets (**VMSS)** using Azure Resource Manager (**ARM**) to manage network traffic.
* Hands on experience to setup, configure continuous build processes using **Jenkins, Maven, Git, Gradle.**
* Experience in writing bash scripts to deploy the **Java**-based packages like EAR and WAR on the WebLogic Application Server.
* Experienced in developing and maintaining **CI/CD** process using tolls like Jenkins & GIT, Chef.
* In-Depth experience with designing and implementing fully automated **CI/CD** pipeline.
* Experienced in Branching, Merging, Tagging and maintaining the version across the environments using **SCM** tools like **GIT** and Subversion **(SVN)** on Linux platforms.
* Expertise 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.
* Experience working with **Apache Hadoop, Kafka, Spark and Log stash.**
* Worked with **Apache Kafka** for High throughput for both publishing and subscribing, with disk structures that provide constant performance even with many terabytes of stored messages.
* Experience in **Hadoop** administration activities such as installation and configuration of clusters using Apache, Cloudera, Hortonworks.
* Hands on experience **in installing, configuring, and using Hadoop** ecosystem components like **Hadoop HDFS,Yarn,**
* Experience in setting up the High-**Availability Hadoop Clusters**. focusing on high-availability, fault tolerance, and auto-scaling. Experience deploying **Ngnix, HAProxy** and Apache.
* Strong ability on using defect tracking and change management tools such as JIRA, BUGZILLA and Bitbucket.
* Established infrastructure and service monitoring using **Prometheus and Grafana.**
* Expertise with Source Code management and strategies using **BitBucket, Git.**
* Building CI/CD pipelines based on Jenkins, and integrating source code management, artefact repositories, test tools with the CI/CD platform.
* Good implementation experience with installation and configuration of Kubernetes, clustering them and managed local deployments in Kubernetes.
* Maintained the repository management tools like Artifactory and Nexus to store the WAR, JAR files which are deployed by using Chef in **Jenkins** tool
* Worked on deployment automation of all the Microservices to pull image from the private Docker registry and deploy to **Docker swarm** cluster using **Ansible.**
* Involved in writing **Ansible Playbooks, Chef CookBooks** and **Salt states** to provision the environment.
* Experience in installation, configuration and administration of **Red Hat Enterprise Linux, Ubuntu, VMWare and Centos.**
* Troubleshooting Linux network, security related issues, capturing packets using tools such as iptables, firewall
* Extensively worked on automation for deployment/configuration of different application servers like **Web sphere, Web Logic, JBOSS** and Web Servers like Apache, Tomcat and Web Containers like **Nginx**.
* Expertise in building real-time data pipelines and streaming apps using apache.
* Managed environments **DEV, SIT, QA, UAT and PROD** for various releases and designed instance strategies
* Experience working on Docker hub, creating Docker images and handling multiple images primarily for middleware installations and domain configuration.
* Knowledge in querying **RDBMS** such ad **Oracle** and **MYSQL** by using SQL for Data Integrity, Installation, Configuration and Management of NoSQL tools such as SQL Servers, DB2, PostgreSQL and MongoDB.
* Focused on containerization and immutable infrastructure. Docker has been core to this experience, along with **Kubernetes** for container management.
* Experience of working with the release and deployment of large-scale Java/J2EE Web applications and Spring boot.
* Experience in building & deploying **Java/SOA, OCI** applications and troubleshooting any build & deploy failures.
* Ability in development and execution of XML, Ruby, Shell Scripts, Power shell.
* Worked with different Bug tracking tools like JIRA, RHEL, Azure, Remedy and Bugzilla.
* Used Kubernetes to deploy scale, load balance, scale and manage Docker containers with multiple namespace versions.
* Ability to quickly understand, learn and implement the new system design, data models in a professional work environment.

**TECHNICAL SKILLS:**

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| --- | --- |
| **Operating Systems** | Linux, UNIX, Windows 7/XP/NT//98/2000/2003/2008, Rhel |
| **Build Tools** | ANT,  Maven, |
| **CI Tools** | Jenkins,  Bamboo |
| **Scripting** | Shell Scripting, Bash, Sh, and Yaml |
| **Version Control** | Subversion (SVN), GIT |
| **Web/Application servers** | Apache, Tomcat, Jboss, WebSphere, WebLogic, VMWare |
| **Database** | MySQL, Oracle10, 11g , DB2 and Cassandra |
| **Language Support** | Java, SQL, XML, ANT,  tools Visual Build Pro, |
| **Cloud Environments** | AWS (Amazon Web Services), Azure, GCP |
| **Containership** | Docker, Kubernetes |
| **Infrastructure Automation Tools** | Ansible, CHEF, Terraform |
| **Code Quality, Analysis, Coverage** | SonarQube, Jira, Bugzilla |
| **Monitor Tools** | Nagios, Cloud watch, New Relic, Icinga |
| **Testing Tools** | Selenium |

**EDUCATION:**

* Bachelors in Computer Science, Jawaharlal Nehru Tech University. Hyderabad India, 2010
* Masters in Information Technology Systems, Wilmington University (Wilmington, DE)- 2016

**WORK EXPERIENCE:**

***Prudential Financial Aug 2020 to Till date***

***Sr. Cloud DevOps System Engineer/Administrator/Consultant***

* Design and implement various container security integrity, scanning, monitoring and compliance tools to meet control requirements and integrate into the new CSS containers environment in AWS.
* Working with AWS - ECS(EC2), ECS (Fargate), Container architecture, EKS, Lambda, ECR, KMS, Secret Manager, state machine, API Gateway, S3, secret manager.
* Working on Static application security testing, Dynamic application security testing, Infrastructure as a code vulnerability scans, and container scans.
* Worked on setting up the state machine and tested through the lambda on all AWS environments
* Worked on setting up the UCD deploy.
* Worked on fortify to setup SSC client and adding AD groups
* Tested through Jenkins build deploying to the ECS and scanning the cloud watch logs
* Experience working with UPF endpoints and fortify jobs
* Added logic to add application AD group to the project in SSC.
* Used **Jenkins pipelines** to drive all micro services builds out to the **Docker** registry and then deployed to **Kubernetes,** Created Pods and managed using **Kubernetes**
* **Building/Maintaining Docker** container clusters managed by **Kubernetes Linux, Bash, GIT, Docker**
* Worked with **OpenShift** platform in managing **Docker containers and Kubernetes Clusters**.
* Experience working with CICD - Code pipeline, code build, and code deploy.
* Managed Docker orchestration and Docker containerization using **Kubernetes.**
* Used **Kubernetes**to orchestrate the **deployment, scaling and management of Docker Containers.**
* Worked with enterprise security tools **(SSH, SFTP, Active Directory, Vintella, TLS,**

**Cyberfusion/MFT-IS, WebSeal).**

* Managed different infrastructure resources, like physical machines, VMs and even **Docker** containers using with **Kubernetes** and **Terraform.**
* Setting up the responder profiles for old and replaced servers
* Responsible for complete **CI/CD** written on groovy scripting.
* Worked on deploying the on premise apps to code pipeline.
* Worked on scriptrunner to automate the bitbucket
* Used **Flume, Kafka** to aggregate log data into HDFS.
* Developed a stream filtering system using Spark streaming on top of Apache **Kafka.**
* Designed a system using Kafka to auto - scale the backend servers based on the events throughput.
* Worked on **Apache Hadoop** and used Kafka for messaging system and spark for processing large sets of data.
* Responsible for Installing, setup and Configuring Apache **Kafka** and Apache Zookeeper.
* Used Kafka to collect Website activity and Stream processing.
* Written ansible playbooks to run the aws creds scripts and scheduled using ansible Tower.

**Environment:** AWS, Linux, Hadoop, Kafka, Python, CI/CD, VPC, IAM, S3, EBS, ELB,SDK, Cloud Watch, Cloud Formation,Kafka, GCP, Docker, Docker Swarm, Microservices, Kubernetes, kubectl, k8s, Jenkins, Bamboo, Ansible, Maven, Ant, SVN, GitHub, Nexus, JIRA, Service Now, New Relic, Java, Apache Tomcat, JSON, Shell

***Louis Vuitton Moet Hennessy USA, New York Jan 2016 to Aug 2020***

***Cloud DevOps Engineer/Administrator/Consultant***

**Responsibilities:**

* Performing all Linux operating system, disk management and patch management configurations, on **Linux** instances in AWS.
* Implementing and setting up Route53 for **AWS Web Instances, ELB, and CloudFront on AWS environment.**
* To achieve Continuous Delivery goal on high scalable environment, used **Docker** coupled with load-balancing tool **Nginx**.
* Virtualized the servers using **Docker** for the test environments and dev-environments needs, also configuration automation using Docker containers.
* Experience in creating **DockerContainers**leveraging existing Linux Containers and AMI's in addition to creating Docker Containers from scratch.
* Implemented a continuous build-test-deployment **(CI/CD)** system with multiple component pipelines using Jenkins to support monthly releases and out-of-cycle releases based on business needs.
* Created snapshots for backup of a cluster in **Amazon S3, and restored using Amazon Red Shift.**
* **Built Jenkins** jobs to create AWS infrastructure from **GitHub** repos containing **Terraform** code.
* Automating AWS resources and maintaining AWS environment with **Python scripting.**
* Converted existing AWS infrastructure to server less architecture **(AWS Lambda, Kinesis),** deployed via **Terraform** and **AWS Cloud Formation.**
* Build CI/CD pipelines based on Jenkins and integrating source code management, artifact repositories, test tools with the CI/CD platform.
* Maintained and Handled operations on **AWS Cloud Resources which includes launching, maintaining and troubleshooting EC2 instances, S3 buckets, VPC, RDS, ELB** creating security groups and worked on atmosphere of cross-functional team within the organization’s Agile project life-cycle.
* Set up a **GCP** Firewall rules in order to allow or deny traffic to and from the VM's instances based on specified configuration and used GCP cloud **CDN** (content delivery network) to deliver content from**GCP** cache locations drastically improving user experience and latency.
* Worked on **google cloud platform (GCP)** services like compute engine, cloud load balancing, cloud storage, cloud SQL, stack driver monitoring and cloud deployment manager.
* Setup Alerting and monitoring using **Stackdriver** in GCP.
* Ensuring seamless availability/reliability of **GCP**-based operations
* Used **Bash** and **Python**, included **Boto3**to supplement automation provided by **Ansible**and **Terraform**for tasks such as encrypting **EBS** volumes backing **AMIs**and scheduling **Lambda**functions for routine **AWS**tasks .
* Maintained and developed Docker images for a tech stack including **Cassandra, Kafka,**and several in house written Java services running in **Google Cloud Platform(GCP)**on **Kubernetes.**
* Worked on GKE Topology Diagram including masters, slave, RBAC, helm, kubectl, ingress controllers **GKE** Diagram including masters, slave, RBAC, helm, kubectl, ingress controllers
* Extensively used Google stackdriver for monitoring the logs of both **GKE** and **GCP** instances and configured alerts from Stackdriver for some scenarios.
* Experience working with **AWS Data** and Analytics technologies such as Glue, Athena, Spectrum, Data Pipeline.
* Understand the latest features like (**Azure DevOps, OMS, NSG Rules**, etc..,) introduced by Microsoft Azure and utilized it for existing business applications
* Automate provisioning and repetitive tasks using **Terraform** and **Python** , Docker container, Service Orchestration.
* Creating, validating and reviewing solutions and effort estimate of converting existing workloads from classic to **ARM** based Azure Cloud Environment
* Developed automation system using PowerShell scripts and JSON templates to remediate the **Azure** services
* Worked on implementing backup methodologies by **Power Shell Scripts** for Azure Services like Azure **SQL Database, Key Vault, Storage blobs, App Services**etc.
* Created Azure services using **ARM** templates (JSON) and ensured no changes in the present infrastructure while doing incremental deployment.
* Handle escalated Support tickets till closure for MS Azure PaaS platform. Configured AD connect to configure federation with on-premises ADFS and Azure AD.Experience is using **Microsoft Azure**
* Design and Develop ETL Processes in AWS Glue to migrate Campaign data from external sources like S3, ORC/Parquet/Text Files into AWS Redshift.
* Designed **AWS CloudFormation** templates using JSON to create customized VPC subnets, NAT to ensure successful deployment of web applications and databases and creating the cross-account IAM roles and giving access to users to access.
* Managed Docker orchestration and Docker containerization using **Kubernetes.**
* Written **Infrastructure as a code(IaC) in Terraform,** Azure resource management, AWS Cloud formation.
* Created reusable **Terraform** modules in both Azure and AWS cloud environments.
* Used **Kubernetes** to orchestrate the deployment, scaling and management of **Docker** Containers.
* Working with **Docker containers, Kubernetes, running/managing containers, container snapshots and managing images, Configured and build OpenStack Havana, Icehouse using Ansible and Shell, Python scripts.**
* Hands-on experience in implementing **Ansible** and **Ansible Tower** as Configuration management tool, to automate repetitive tasks, quickly deploys critical applications, and proactively manage change by writing Python code by using **Ansible, Python API to automate Cloud Deployment Process.**
* Responsible for build and deployment automation using **AWS, Docker, Kubernetes containers and Chef.**
* Manage Amazon RedShift clusters such as launching the cluster and specifying the node type as well.

**Environment:** AWS, Azure, GCP, Linux, Python, CI/CD, VPC, IAM, S3, EBS, ELB,SDK, Cloud Watch, Cloud Formation,Kafka, GCP, Docker, Docker Swarm, Microservices, Kubernetes, kubectl, k8s, Jenkins, Bamboo, Ansible, Maven, Ant, SVN, GitHub, Nexus, JIRA, Service Now, New Relic, Java, Apache Tomcat, JSON, Shell, Python.

***Keypoint Technologies Private Limited Jan 2010 - Dec 2014***

***DevOps Engineer***

**Key Point Technologies**

**Project 1: Adaptxt Aug 2012 – Dec 2014**

**DevOps Engineer**

* Involved in designing and deploying multitude applications utilizing most of the AWS stack (Including EC2, Route53, S3, RDS, IAM) focusing on high-availability, fault tolerance, and auto-scaling in AWS Cloud Formation.
* Configured AWS IAM and Security Group in Public and Private Subnets in VPC.
* Created AWS Route53 to route traffic between different regions.
* Created a **CI/CD** platform that automates the release of software from development to production through various approval gates and pipeline steps. It also supports multiple languages and frameworks such as Spring Boot, Docker based Apps and Python.
* Designed AWS Cloud Formation templates to create custom sized VPC, Subnets to ensure successful deployment of Web applications and database templates.
* Implemented automated local user provisioning instances created in AWS cloud.
* Setup and build AWS infrastructure various resources like VPC, EC2, S3, IAM, EBS, Security Group, Auto Scaling, and RDS in Cloud Formation JSON templates.
* Configuring and Networking of Virtual Private Cloud (VPC) Written Cloud Formation templates and deployed AWS resources using it.
* Worked with Terraform for automating VPCs, ELBs, security groups, SQS, S3 buckets.
* Automated deployment of builds to different environments using Jenkins
* Strong experience utilizing Jenkins for enterprise scale infrastructure configuration and application deployments - checking out code from SVN/Git and used ant/maven to build war/jar artifacts
* Implemented a Continuous Delivery pipeline with Docker, Jenkins and GitHub and AWS AMI's.
* Integrated Sonarqube with Jenkins to test the code quality.
* Working with Jira and confluence to update the documentation related to Jenkins, AWS, Docker, and Kubernetes.
* Wrote Lambda functions in python for AWS’s Lambda which invokes python scripts to perform various transformations and analytics on large data sets in clusters.
* Creation of RDS database instances PostgreSQL in AWS and the MongoDB cluster making use of EC2 and VPC and launched via Cloud Formation Template.
* Used Docker in the process of implementing high level API which provide light weight containers to run the applications, as well as for building and pushing the images in various environments.
* Load balancing the application from dev through QA, easing the code development and deployment pipeline by implementing Docker containerization.
* Worked on creation of Docker containers and Docker consoles for managing the application life cycle.
* Used Kubernetes to manage containerized applications using its nodes, Config Maps, selector services and deployed application containers as pods and created Clusters using Kubernetes and worked on creating many pods, replication controllers, services, deployments, labels by writing YAML files.
* Maintaining Subversion(SVN) and GIT repositories, Proposed and implemented branching strategy suitable for agile/scrum development for automating builds with Jenkins.
* Used Bug tracking tool like JIRA for ticketing, Integrating into Splunk Enterprise and Bug Reporting for products through JIRA.
* Integrate Splunk with AWS deployment using ansible to collect data from all database server systems into Splunk, also utilized New Relic for monitoring.
* Managed version control tools like GIT and Bitbucket for branching, merging, and resolving the conflicting errors.
* 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 Chef.
* Used AWS Beanstalk for deploying and scaling web applications and services developed with Java, Python, Ruby, and Docker on familiar servers such as Apache.
* Build servers using AWS, importing volumes, launching EC2, RDS, creating security groups, auto-scaling, Elastic load balancers (ELB's) in the defined virtual private connection.
* Written test scripts using selenium testing tool
* Used Terraform to map more complex dependencies and identify network issue.
* Configured plugins for the integration tools to the version control tools.
* Managed environments DEV, SIT, QA, UAT and PROD for various releases and designed instance strategies.
* Responsible for the development and maintenance of processes and associated scripts/tools for automated build, testing and deployment of the products to various developments.

**Environment:** AWS, Chef, Jenkins, VDI, VPC, Route53, CI/CD, EBS, SQL, ELB, Cloud watch, Cloud Formation, Docker, Jira, AWS CLI, AWS Auto Scaling, Unix/Linux, Python, Ruby, Shell scripting, Git.

**KeyPoint Technologies**

**Project 2: Xploree Aug 2011 – Jul 2012**

**DevOps Engineer**

* Created network architecture on AWS VPC, subnets, Internet Gateway, Route Table and NAT Setup and set-up databases in AWS using RDS, storage using S3 bucket and configuring instance backups to S3 bucket.
* Actively involved in Architecting the Puppet infrastructure to manage servers in different environments and utilized Puppet for configuration management of hosted Instances within AWS.
* Written Puppet manifests to automate configuration of a broad range of services and used Puppet server for workstation to manage and configure nodes.
* Built CI/CD pipeline from scratch using Jenkins for our Java applications by integrating GitLab, JIRA, Maven and Tomcat.
* Configured Jenkins-Artifactory plugin to upload the artifacts on to Artifactory after the build is success and integrated build tools with Jenkins and created jobs to automate and deploy the application into end servers.
* In the CI pipeline, mainly focused on performing integration of code quality analysis techniques like check styles, find bugs, Junit with CI tools like Jenkins, Ant and Maven.
* Installed Jenkins Plug-in for GIT Repository, Setup SCM Polling for immediate Build with Maven and Maven Repository (Nexus Artifactory) and Deployed Apps using custom ruby modules through Chef as a CI/CD Process.
* Strong in building and written Shell Scripts ad Perl Scripts on UNIX and experienced in development with Shell, Python, PowerShell scripting languages.
* Used SonarQube dashboard to review the code changes and the reviewer would comment or make changes.
* Installed and administrated Nexus repository to deploy the artifacts generated by maven and to store the dependent jars, which are used during the build.
* Involved in setting up JIRA as defect tracking system and configured various workflows, customizations and plug-ins for the JIRA bug/issue tracker.

**Environment:** Amazon Web Services, EC2 instance, S3, CI/CD, IAM, VPC, CloudWatch, Puppet, Chef, Jenkins, Nexus, Maven, Git, SVN, JIRA, Bash, Jboss, Web Sphere, Http, Linux.

**KeyPoint Technologies**

**Project 3: KPT Global Portal Aug 2010 – Jul 2011**

**Build & Release Engineer**

* Created continuous integration system using Ant, Jet Brains, Team City, full automation, Continuous Integration, faster and flawless deployments.
* Experience in designing, building, maintaining and coordinating an automated build/release process using Git and Jenkins.
* Performed all necessary day-to-day GIT support for different projects. Responsible for design and maintenance of the GIT repositories and the access control strategies.
* Automated Linux production server’s setup using Puppet scripts. Documented release builds and source control processes and plans.
* Executing the CI Jenkins build jobs for both JAVA and .NET application automation builds &CD into the appropriate web servers like Apache Tomcat & IIS.
* Defined instances in code, next to relevant configuration on what running and then created the instances via Puppet.
* Worked with the Architects on Software Development Life Cycles (SDLC) process being the owner of post development environments.
* Implemented Configuration Management, Change Management policies and procedures and Configured Puppet to perform automated Deployments.
* Deployed the applications to Tomcat Application Server and static content to apache web servers and installed, configured and maintained Nginx.
* Established processes and tools to maintain code base integrity, including check-in validation rules and branch/merge processes.

**Environment:** GIT, Jenkins, TeamCity, Nagios, Maven, Puppet, Shell Script, Linux, Tomcat, SQL.

**Key Point Technologies**

**Project 4: KPT Global Portal Jan 2010 – Jul 2010**

**Java Developer**

**Responsibilities:**

* Participated in gathering and understanding the client's requirements.
* Develop code as per the change requests provided.
* Wrote unit tests with JUNIT framework for testing applications and Server-side logging & client-side logging using Log4J.
* Extensively used ANT for creating build scripts and deployment into Web Logic Application Server.
* Designed and developed User Interface, application modules using JSP, JSF, struts, JavaBeans, HTML, CSS and JavaScript and AJAX.
* Re-designing of the website used the JSP to modify the look and feel of the website.
* Developed the HTML and JSP Pages.
* Migrate current struts-based application to spring framework.
* Developed database access components with the back end as Oracle.
* Used RAD & WSAD for building application EAR, for deploying on Websphere6.0 Application server on multiple environments like QA, Staging, and Live.
* Working with SOAP web services & EJB to communicate with the applications.

**Environment:**Java 1.5, Struts Framework, Spring Framework, JSP, JDBC, JUNIT, UML, XML, CSS, HTML, Oracle 9i, Java Script, Ant, mavesn, eclipse