



Hemanth

Cloud & DevOps Engineer

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Professional Summary

Having 6.5 years of hands-on experience in cloud computing services like Azure and AWS. Implemented **Software Integration, Configuration, packaging, building, automating, managing, and releasing code** from one environment to other environment and deploying to servers by using these cloud services and worked as **Cloud DevOps Engineer, DevOps Engineer with Continuous Integration & Continuous Deployment/Delivery** and Automation of infrastructure including end-to-end code configuration using different tools

- Experienced in various **Azure** services like **Azure Virtual Machines, Azure Cognitive Search, Azure Active Directory, API Management, Scheduling, Azure Autoscaling, PowerShell Automation, Azure DNS, Azure VPN Gateway, Compute (Web Roles, Worker Roles), Caching, Azure SQL, NoSQL, Storage, and Network services.**
- creating **Web-Jobs, Azure Cosmos DB, Active Directory, Azure Windows server, Microsoft SQL Server, Microsoft Visual Studio, Windows PowerShell, Cloud infrastructure** and managed **Azure IaaS, PaaS, Provisioning VM's, Virtual Hard disks, Virtual Networks, Deploying Web Apps.**
- Have an extensive command over **Azure Virtual Machines, ARM Templates, Azure IaaS – virtual Networks, Resource Groups, Traffic Manager, Virtual private Networks, Load Balancing, Application Gateways, Auto scaling and applied high availability with Azure Classic and Azure Resource Manager** deployment models.
- Through Azure Application Insights, identified the issues in the live applications by monitoring them and analyzing its data through data analytics tools.
- Expertise in creating and Supervising Amazon Web Service like **EC2 instances, VPS, RDS, S3, Lambda, SNS, IAM, Route 53, SQS, EBS volumes and snapshots, AMI's Security Groups, Elastic Load balancing, AWS Redshift, Amazon Cloud Watch and Amazon Cloud Formation** for different zones in development, testing and production environments.
- Proficient in writing **IaC (Infrastructure as a code)** in Terraform, Azure resource management, AWS Cloud formation. Developed reusable Terraform modules in both Azure and AWS cloud environments.
- Worked on tagging standard for proper identification and ownership of **EC2 instances** and other AWS Services like **RDS, S3, Route53, SNS, SQS, Cloud Front, cloud watch and Cloud Trail.** Developed **AWS cloud** Structured prototypes to create customized **VPC, subnets, EC2 instances, ELB and security groups**

- Using **CloudFormation** and the framework to automate the creation of AWS environments, as well as deployment on **AWS**, build scripts (**AWS CLI**), and automating solutions with Shell and Python.
- Developed templates for **AWS infrastructure** as code using **Terraform** to build staging and production environments and experienced in using Terraform for **building, updating, and versioning of infrastructure**.
- Profound skilled in using **Docker Swarm, Docker Hub, Docker Engine, Docker images, Docker Weave, Docker Compose** and **Docker Registry** and used **containerization** to make applications platform when moved into different environments.
- Extensive usage of **Docker** for setting up the proper environment for development and testing. Worked on docker container snapshots, attaching to a running container, removing Docker images, and managing containers.
- Experience in using Build Tools such as **MAVEN**.
- Proficient in creating **Ansible playbooks** for managing application/OS configuration files in GIT hubs, connecting with **Jenkins**, verifying with Jenkins plugins, and deploying applications in **Linux environments**. Frequently used **Ansible Tower** which offers an intuitive dashboard and role-based access management.
- Installed, configured, and maintained **Jenkins** and **Bamboo** for the purpose of **Continuous Integration (CI)** and **End-to-End** automation for all build and deployments using **CI/CD** for database using **Jenkins**.
- Working knowledge of automating **Logstash** as part of the **ELK Stack (Elastic Search, Log Stash, and Kibana)** setup and management.
- Extensive knowledge in **Kubernetes** to manage containerized applications using **nodes, Config Maps, selector, Services**, and deployed application containers as **Pods**. Installed and configured **Kubernetes** to manage **Docker containers**.
- Practical knowledge in using **Kubernetes** to create APIs. **Docker containers** were deployed through Kubernetes to manage the microservices utilizing its **Nodes, Pods, Selectors, and Services**, and **container replicas** were scheduled, deployed, and managed into a node cluster.
- Thorough knowledge of the **OpenShift** platform for managing **Docker Containers, Kubernetes** infrastructure that is **load-balanced**, broadly accessible, fault-tolerant, and ready to function in a production setting.
- Designed application environment by user monitoring, infrastructure visibility, performance management using **AppDynamics**.
- Experience with **Grafana** for visualization, monitoring, analysis of data.
- Used **Prometheus** to customize and produce metrics without impacting application performance and improved the alert system.
- Implemented various **agile frameworks/tools** for DevOps like **ELK (Elastic Search), Docker based CI/CD framework**, High-scaled and distributed computing environment.
- Designed databases and created SQL queries for **MySQL**.

- Installed and set up the **PostgreSQL** database on **RedHat** and **Debian** servers.
- Skilled at utilizing **Nagios** to execute capacity planning, track applications and servers, and alert users when thresholds are reached. Additionally accountable for using Nagios to keep an eye on regular network maintenance and performance checks.

Technical Skills:

Operating System	Linux (RedHat 4/5/6/7, CENTOS), Unix, Solaris 11/10, Ubuntu 12/13/14, Windows NT, Windows 8, 12, 12R2, MacOS.
Cloud Platforms	AWS, Azure
Web Technologies	HTML, CSS
Automation/Configuration Management Tools	Jenkins, Chef, Puppet, Ansible, Kickstart, Jumpstart
Virtualization Technologies	Windows Hyper-V, VMware ESXi, Virtual Box, vCenter, vSphere, Power VM, Ubuntu
Containerization Tools	Kubernetes, Docker, OpenShift, Spinnaker
Application/Web Server	Tomcat, Apache, Application Server, IIS, Oracle WebLogic Server 11g
CI and Build Tools	ANT, Maven, Hudson, Bamboo
SDLC	Agile, Scrum
Testing and ticketing tools	SonarQube, Selenium, JIRA, ServiceNow, Remedy, ConnectWise,
Monitoring and Logging Tools	Nagios, Splunk, ELK, Datadog, Dynatrace, Grafana, Splunk.
Version Control Tools	GIT, GitHub, Subversion, Bit-Bucket, CVS, Clear Case
Scripting	Python, Shell Scripting, Ruby Scripting, Power Shell, YAML Perl
Database Systems	Oracle 10g/9i, SQL Server, MySQL, SQL Server, NoSQL, Mongo DB, Cassandra
Networking/Protocol	DNS, DHCP, Cisco Routers/Switches, NIS, NFS, WAN, SMTP, LAN, FTP/TFTP, TCP/IP

Education:

Bachelors in Electrical Engineering from SV College **2016**

Certifications:

Certified **Azure DevOps Engineer**.

Certified **Terraform Associate Expert**.

Professional Experience

Client: IBM

Duration: April 2021-Current

Role: Senior DevOps Engineer

Responsibilities:

- Configured and deployed Azure Automation Scripts for a multitude of applications utilizing the **Azure stack** services including **Compute, Web & Mobile, Blobs, ADF**,

Resource Groups, Azure Data Lake, HDInsight Clusters, Azure SQL and ARM focusing on automation, created quality gates in **SonarQube** dashboard and enforced in the pipelines to fail the builds when conditions not met.

- Implemented Azure Hybrid integration to integrate the applications, data and processes using API's. Worked with **Azure AD, Azure Blob Storage** and Data Factory to compose data storage, movement, and processing micro-services into automated data pipelines and have used **Azure compute services** and Azure Web apps.
- Deployed **Azure IaaS** virtual machines (VMs) and Cloud services (**PaaS**) into secure **VNets** and **subnets**, creating pipelines for deploying code from **GitHub** to **Kubernetes** cluster in the form of **Docker** containers using **Spinnaker**.
- Worked on Server less services (**Azure Functions**) created and configured **HTTP Triggers** in the **Azure Functions** Enabling Application insights for monitoring and performing load testing on the Applications using the **VSTS**.
- Worked with **Terraform** key features such as Infrastructure as code, Execution plans, Resource Graphs, Change Automation and Implemented **Terraform** modules for deployment of applications across **Azure**.
- Prepared capacity and architecture plan to create the **Azure cloud** environment to host migrated **IaaS VMs** and **PaaS** role instances for refactored applications and databases. Established connection from **Azure** to On-premises datacenter using **Azure ExpressRoute** for Single and Multi-subscription connectivity.
- Implemented Jenkins jobs to create **Azure** Infrastructure from **GitHub** repositories containing **Terraform code** and created on-premises active directory authentication using automation with **ansible play books**.
- Worked on **Docker-Compose, Docker-Machine** to create **Docker** containers for testing applications in the QA environment and automated the deployment to **Nexus**, scaling and management of containerized applications.
- Configured and setup environment within **Kubernetes** Cluster with a master and 3 **minions**. Collaborating with development team for creating **Docker** and **Kubernetes** containers for each micro-service and installed all required dependencies for each container.
- Written the **Ansible playbooks** which are the entry point for **Ansible** provisioning, where the automation is defined through tasks using **YAML** format to setup Continuous Delivery pipeline and ran **Ansible Scripts** to provision Dev servers.
- Experienced in building pipeline for distributed stream processing using kafka and for metrics evaluation used **Prometheus** and **Grafana**.
- Integrated **Docker** container-based test infrastructure to **Jenkins** CI test flow and set up build environment integrating with **GIT** and **JIRA** to **trigger** builds using **Webhooks** and **Slave Machines**.
- Created a **Jenkins** pipeline to drive all micro-services builds out to **Docker Hub** and then deployed to **Kubernetes**, created **pods** and configured **Kubernetes** Replication controller.
- Created several pods using Master and Minion architecture of **Kubernetes** and developed microservice on boarding tools leveraging **Power Shell** allowing for easy creation and maintenance of build jobs and **Kubernetes** deploy and services.
- Installed and configured **Kubernetes** effectively Utilized **Kubernetes** and **Docker** for the runtime environment of the **CI/CD** system to build, test and deploy and scheduled, deployed, and managed container replicas onto a **node** cluster using **Kubernetes**.
- Build and deploy the java EE applications and web based applications to middleware web application servers like **Apache tomcat, WebLogic**

- Implemented the setup for **master slave architecture** to improve the performance of **Jenkins**.
- Responsible for designing and deploying best **SCM** processes and procedures.
- Involved in modifying **pom files** according to our needs to establish **the code quality tools integration**.
- Coordinate/assist developers with establishing and applying appropriate branching, fork and reviewing using **GIT** source control.
- Installation of new applications in **Linux based operating systems** and then implement same in the Enterprise level.
- Continuous monitoring and health check of the host machines and cleanup the workspace activities.
- Worked closely with software developers and DevOps to **debug software and system problems**.
- Analysis of error logs in all **Jenkins and Bit Bucket, Artifactory, SonarQube**
- Installation of DevOps tools in **Linux platform** and connecting to each other.
- Worked with **Bit Bucket** to create projects and repositories and provide access to users.
- Provide support to other team members on Jenkins and Bit bucket etc.
- Performed software configuration/release management activities for different Java applications.
- Designed distributed private cloud system solution using **Kubernetes (Docker)** on **CoreOS**. Automated various infrastructure activities like Continuous Deployment, Application Server setup, Stack monitoring using **Ansible playbooks** and has Integrated **Ansible** with **Jenkins**.
- Managed **Nexus** repository to download artifacts during builds in **Jenkins** and integrated **Ant** and **GIT** to deploy project related tags.
- Installed and configured **Nagios** as monitoring tool for disk usage, CPU utilization, list of open files etc. and sending alerts to our teams based on the same. Setup threshold alerts in **Nagios XI** and updated contact definitions to notify potential service or host interruptions.
- Maintained build related scripts developed in **Ant** and **Power Shell**. Modified build configuration files including Ant's build.xml.
- Involved on migrating **SQL** Server databases to **SQL Azure** Database using **SQL Azure Migration Wizard** and used Python **API** to upload agent logs 3into **Azure blob storage**.
- Created and Maintained **Subversion repositories, branches and tags**.
- Used Jenkins, for Continuous Integration and deployment into Application Server.
- Installed **sonar on Jenkins server** and configure with the build process for the code analysis process for better code quality and rapid feedback for development teams and manager.
- Working with **Azure Artifactory with Artifacts** (War, Jar, Tar.gz, ear, pom) along with deploying project maven-based dependencies to Artifactory.

Environment:

Azure, Azure AD, Azure SQL, Azure Network, PCF, ARM, Kubernetes, Docker, Ansible, Jenkins, Ant, GIT, Terraform, PowerShell script, Power shell, Java script, Ruby, Splunk, Elasticsearch, Jira, Linux, MongoDB, Microsoft Azure Storage, JIRA, IIS, Hyper-V, VLAN, DNS, DHCP, MSDNAA, Visual Studio, SQL server, Grafana.

Client: Bank of Montreal, Canada

Duration: June2019-March2021

Role: DevOps Engineer

Responsibilities:

- Managed **AWS** design architectures with **AWS IaaS/PaaS, DevOps, Storage, Databases** Components also Work with **Cloud Platform Teams** on implementing new features on **AWS** platform and Design and Development work on building scripts and automations for **AWS cloud**.
- Worked in AWS Cloud **IaaS** stage with components **VPC, ELB, Auto-Scaling, EBS, AMI, EMR, Kinesis, Lambda, CloudFormation template, CloudFront, CloudTrail, ELK Stack, Elastic Beanstalk, CloudWatch and DynamoDB**.
- Implemented **Multifactor Authentication (MFA)** for various AWS services.
- Architected and Integrated in Infrastructure Development and Operations involving **AWS Cloud platforms, EC2, EBS, S3, VPC, RDS, SES, ELB, Auto scaling, Cloud Front, Cloud Formation, Elastic Cache, Cloud Watch, SNS**. Strong Experience on **AWS** platform and its dimensions of scalability including **VPC, EC2, ELB, S3 and EBS, ROUTE 53**.
- Set up the **scripts** for creation of **new snapshots** and deletion of old snapshots in **Amazon S3** and worked on setting up the **life cycle policies** to back the data from **AWS S3 bucket** data.
- **Ansible Playbooks** to automate in AWS services like Launching EC2, Provisioning IAM, Configuring VPC, EBS, Monitoring using Cloud Watch and Cloud Trail.
- Built and configured a virtual data center in the **AWS** cloud to support Enterprise Data Warehouse hosting including **Virtual Private Cloud (VPC), Public and Private Subnets, Security Groups, Route Tables and Elastic Load Balancer**.
- Collected all the log data from instances and provide report on security incidents using Security information and Event Management (SIEM).
- Build **Jira/Confluence/Crowd** from scratch on **AWS Linux System**, which include the Linux server setting, **MySQL** database server install, configuration, and new database creating, **Jira, Confluence, and Crowd** app server installation.
- Managed **Ubuntu, RHEL (Linux)** and Windows virtual servers on **AWS EC2** using **ANSIBLE**, involved in writing an **ANSIBLE playbook** from scratch to upgrade these servers one at a time in serial to reduce the downtime.
- Monitored and analyzed internals of a computing system including network packets with host-based intrusion detection system (HIDS).
- Used **Ansible Tower**, which provides an easy-to-use dashboard and role-based access control, so that it's easier to allow individual teams access to use Ansible for their deployments. Worked on **Docker and Ansible** in build automation pipeline and Continuous Deployment of code using **Jenkins** and wrote Playbooks to automate Ansible servers using **YAML scripting**.
- Managing **Docker** orchestration and Docker containerization using **Kubernetes**.
- Involved with **Docker container** management systems like **Kubernetes** and deploying Docker Engines in Virtualized Platforms for containerization of multiple apps.
- Worked on deploying **Docker Clusters** to Kubernetes and Implemented a Continuous Delivery pipeline with Docker and AWS. Good understanding of **Kibana, log stash and Elastic Search**.
- Worked on infrastructure with **Docker containerization**. Collaborated with development support teams to setup a continuous delivery environment with the use of **Docker**.

- Integrated **Jenkins** with various DevOps tools such as **Nexus, SonarQube, Ansible** and used **CI/CD** system of Jenkins on **Kubernetes** container environment, utilizing Kubernetes and **Docker** for the runtime environment for the CI/CD.
- Created, maintained, and administered **GitHub** as Source control manager and GitHub branch management and merging to facilitate collaboration between development teams and Configured Web hooks for push events on GitHub.
- Migrated pipelines builds from Bamboo to **Jenkins** and integrated them with Stash and JIRA.
- Worked on **Jenkins, GitHub**, and all internal build systems for the core development team on an enterprise-level.
- Proficient in understanding and managing builds using **Jenkins, Nexus and Bitbucket**
- Experience in build and deploy of Software to private / public cloud environment using automated deploy tools such as XL Release
- Experience in managing version controls and Bitbucket repo
- Experience with various tools such as **Sonarqube and Veracode**
- Understanding of **Azure public cloud** and **AKS**
- Experience in containers and **Kubernetes**
- Working experience in **CI/CD, yaml** and **json** config files.
- Nice to have experience with **Terraform**
- Implemented **File Integrity Monitoring (FIM)** to monitor and detect changes in the services from cyberattack.
- Prepared CI and CD, along with code quality check, using **Git, Jenkins, SonarQube, Maven, and Nexus** for Java App.

Environment: Terraform, Python, Ansible-playbooks, Apache-Tomcat, Git, Chef, VMWare, Puppet, Docker, AWS, Chef, Jenkins, Azure, PowerShell, Nagios, Ansible, TFS, JIRA, Shell/Perl Scripts, SonarQube.

Client: HSBC Bank, India.

Duration: July 2016- May 2019

Role: Build & Release Engineer

Responsibilities:

- Set up **Jenkins** server and build jobs to provide Continuous Automated builds based on polling the **Git** source control system during the day and periodic scheduled builds overnight to support development needs using **Jenkins, Git, and Ant**.
- Scheduled the **Linux Cron jobs** and **Jenkins jobs** for build automation. Developed **Perl** and **shell** scripts for automation of the build and release process & to perform deployments to **JBoss and Tomcat Web servers**.
- Designed and managed Build and Release cycle activities in Agile Methodologies. Developed build and deployment processes for Pre-production environments. Managed Sonar type **Nexus** an **enterprise-level package** management server.
- Designed and scripting using **ANT** for **J2EE, Web Services, Reusable JARS**, Web Client and Open Source in creating Master build.xml build Properties & pom.xml files and provided technical support to the development team for compilation problems.
- Maintained build related scripts developed in **ANT** and **Shell**. Modified build configuration files including Ant build.xml and created and maintained Subversion repositories, branches and tags and Experience in Administering **SVN**.

- Installed **Bamboo** and perform troubleshooting during installation to implement the CI process for the Java application builds and setting up and configuring **Bamboo**, created Jobs for automating build and deploy activities.
- Migrated from Bamboo worked and on **Jenkins** for continuous integration and for End-to-End automation for all build and deployments.
- Implemented continuous integration using Jenkins **master** and **slave** configuration. Configured security to Jenkins and added multiple nodes for continuous deployments.
- Configuration and administration of **LDAP**, **NFS** and **NIS** in **Linux** and implemented Samba for sharing of resources between Linux and Windows environments.

Environment:

Jenkins, Git, Agile, Linux, RHEL, SELS, AIX, SVN, Perforce, KVM, Puppet, Bash Scripting, Python, ANT, Bamboo, JIRA, JBoss, Artifactory Application Servers, Nexus, Windows, WebSphere Application Server, Python, Nagios.