**Manasa**

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## Summary:

* Cloud DevOps engineer with around 10 years of experience in Cloud (Azure, AWS, GCP), DevOps, Configuration management, Infrastructure automation, Continuous Integration and Delivery (CI/CD).
* Experienced in AWS Cloud platform and its features which includes EC2, S3, VPC, EBS, ELB, RDS, RDB, AKS, DynamoDB, RedShift and Route 53, EC2 AMI, EBS Cloud watch, AWS Config, and Auto-scaling, IAM.
* Experienced in Amazon EC2 setting up instances and setting up security groups and databases in AWS using S3 bucket, configuring instance backups to S3 bucket, virtual private cloud (VPCs), and security groups.
* DevOps experience with Ansible, Maven, Jit, Jenkins, Terraform, Docker, Kubernetes and AWS.
* Knowledge on Setting up GCP Firewall rules 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.
* Experienced in Microsoft Azure Pipeline implementing and Monitoring of CI and CD Pipelines.
* Optimized the end-to-end process of developing, deploying, and managing machine learning models with the help of ML Ops (Machine Learning Operations) tools.
* Worked on container network security strategy for Kubernetes and Istio Service Mesh.
* Worked on designing Microservice architecture using Istio for deploying on multi–Kubernetes Clusters.
* Developed infrastructure as a code using Terraform while applying a fully modularized approach. Built networking infrastructure, EKS (Kubernetes) clusters, and relational databases in AWS as a code.
* Expertise in using build tools like MAVEN and ANT for the building of deployable artifacts such as war & ear from source code.
* Experience in development and configuration experience with software provisioning tools like Chef, Puppet and Ansible.
* Implemented a CI/CD pipeline using Azure DevOps (VSTS, TFS) in both cloud and on-premises with GIT, MS Build, Docker, Maven along with Jenkins plugins.
* Extensively worked on Jenkins by installing, configuring and maintaining for the purpose of continuous integration (CI) and for End-to-End automation for all build and deployments.
* Implement and enforce best practices for code promotion across the various environments (builds, approvals, release). Strong SDLC background in Agile practices.
* Experience in building and managing Kubernetes clusters in AWS (EKS)
* Experience in supporting containerized workloads – Docker, EKS, Kubernetes
* Installed and Setup Web servers (Apache and Tomcat), DB Server (My SQL).
* Experience in setting up deployment procedures and processes (Maven, Jenkins, Puppet, etc.).
* Experienced in disk management using SAN, NAS, iSCSI, and other related protocols.
* Experience in Site Reliability, creating APIs, Prometheus, Grafana, and microservices.
* Experience in monitoring, tracing, and logging tools like AppDynamics, Zipkin, ELK stack.
* Experience in developing microservices using Groovy for CI/CD automation.
* Experience in data modelling, ELT using Snowflake SQL, implementing complex stored Procedures and standard DWH and ETL/ELT concepts.
* Experience with DevOps Change Management, used to make changes like small increments and tested thoroughly before being deployed into production.
* Experience in monitoring and managing IT operations in real-time by using ActiveBatch.
* Experience with monitoring and logging tools like Dynatrace, Splunk.
* Experience and knowledge of Configuration Management CD/CI tools (Jenkins).
* Experience in Branching, Merging, Tagging and maintaining the version across the environments using SCM tools like Subversion (SVN), GIT (GitHub, GitLab), ClearCase, Harvest and VSS.
* Experience in using tools like Jira and OTRS for ticketing.
* Experience in managed Kubernetes services such as Azure Kubernetes and AWS Elastic container service.
* Experience on RabbitMQ implementation on Kubernetes platform Openshift.
* Mitigating On-premises infrastructure to cloud platforms like AWS and involved in virtualization using (VMware), open stacks and infrastructure orchestration using containerization technologies like Docker, Kubernetes and OpenShift.
* Experience in using Multi-tenant Kubernetes to host multiple applications for different teams and provide Kubernetes as a service to multiple clients.
* Experience with application monitoring (New Relic, AppDynamics)

**Skills & Abilities:**

Cloud Platform : AWS, Azure, Google Cloud Platform (GCP) OpenStack and PCF

CI/CD : Jenkins, Bamboo, TeamCity, VSTS, Azure DevOps

Containerization & Orchestration Tools : Docker, Docker Swarm, EKS, Kubernetes Clusters, AWS ECS.

Configuration Management Tools : Ansible, Puppet and Chef

Version Control Tools : GIT, Bitbucket and SVN.

Build Tools : Maven, ANT and Gradle.

Tracking Tools : JIRA and Orange Scrum.

Artifact Repositories : Nexus and Artifactory

Logging & Monitoring Tools : Nagios, Splunk and ELK Stack, CloudWatch,Grafana, Prometheus.

Application Servers : Apache Tomcat, Nginx, WebSphere, WebLogic, JBoss, Samba, SQL Server.

Database : Amazon Aurora, Dynamo DB, MongoDB, Oracle, SQL Server, MySQL.

Network Service & Topologies : LDAP, DNS, Web, FTP, Sub netting, LAN, VPC.

Scripting Languages : p, Python, SQL, Groovy, HTML, CSS3, JSON and YAML.

Infrastructure Spin-up Tools : Terraform, CloudFormation and Azure Resource Manager Templates

**Experience:**

**Client: CVS , Richardson, TX**

**Role: Azure Devops Cloud Engineer (Sep 2020 – Present)**

* Created recommendations on how to duplicate a subset of on-premise machines to the Azure Infrastructure as a Service (IAAS) offering which will be used for disaster recovery. This analysis included the specifics to synchronize on-premise data with SQL Server and SharePoint instances hosted in VMs.
* Utilized Azure Site Recovery and Azure Backup- Deployed Instances on Azure environments and in Data centres and migrating to Azure using Azure Site Recovery and collecting data from all Azure Resources using Log Analytics and analysed the data to resolve issues.
* Implemented Serverless services, created and configured HTTP Triggers in the Azure Functions with application insights for monitoring and performing load testing on the applications using the Visual Studio Team Services (VSTS) also called as Azure DevOps Services.
* Performed Configuration of Azure Web Apps, App services, Application insights, Azure DNS, Azure Network Watcher and Implementing Azure site recovery, Azure stack, Backup and Automation.
* Managed Azure Infrastructure, Azure web roles, Worker roles, VM Role, Azure SQL, Azure Storage, Azure AD Licenses, Virtual Machine Backup and Recover from a Recovery services vault using Azure PowerShell and Azure portal.
* Worked on Azure Site Recovery and Azure Backup - Deployed Instances on Azure environments and in Data centers and migrating to Azure using Azure Site Recovery and collecting data from all Azure Resources using Log Analytics and analyzed the data to resolve issues.
* Implemented various resources in Azure using Azure portal, PowerShell on Azure Resources Manager deployment models.
* Managed on-premises infrastructure with the help of Infrastructure as code (IaC), like physical servers and network equipment, using tools like Puppet and Chef.
* Worked on Azure Data Factory, Azure Data Lake Analytics, Azure Database and Azure Data Warehouse. Created Azure SQL DB, Azure SQL Data warehouse, Azure Analysis Services, Azure IOT, Azure Data Factory.
* Implemented Terraform Templates to automate the Azure Iaas virtual machines using terraform modules and deployed virtual machine scale sets in production environment.
* Implemented Docker -maven-plugin in Maven pom.xml files to build Docker images for all microservices and later used Docker file to build the Docker images from the Java jar files.
* Implemented CI/CD pipeline using Nexus, bitbucket and groovy to develop and deploy applications in a continuous delivery and reduce manual intervention in the deployment process. Also, deployed application to upper laned by CICD automation using ansible tower and delivered the high-speed deployments for the application team and business. Also assisted and worked in different sub-projects, end to end CI-CD setup for technologies like .NET, database, Informatica, Python, SQLLDR technologies.
* Configured, monitored, and automated Google Cloud (GCP) Services as well as involved in deploying the content cloud platform using Google compute engine, Google storage buckets.
* Created Google storage buckets and maintained and utilized the policy management of these buckets and Glacier for storage and backup on Google cloud (GCP). Also Configured a Google cloud Virtual Private Cloud (VPC) and Database Subnet Group for isolation of resources.
* Built GCP cloud with Cloud Armor protecting DDOS and acting as WAF, Cloud DNS, GCP Cloud Endpoints for proxying the APIs traffic as a Gateway, worked with GCP Cloud Load Balancing in routing the traffic to Cloud routers with private subnets.
* Working experience with Harness framework to automate the building, testing, and deployment.
* Integrated Argo CD with Azure DevOps through a webhook and then configured the webhook in Azure DevOps to trigger Argo CD whenever there is a new deployment.
* Deployed and managed applications on Kubernetes clusters with Argo CD, and to ensure if the actual state of the application matches the desired state defined in the Git repository.
* Installing and administrating monitoring tool (Nagios) and managed with administered like JIRA/Confluence/Jive add-ons, plugins, and extensions.
* Utilized OpenShift for container orchestration with Kubernetes container storage, automation to improve container network multi-tenancy, and multi-regional deployment models and patterns for large-scale applications.
* Azure Container Service (ACS) was used to deploy a Windows Kubernetes (K8s) cluster from the Azure CLI and Kubernetes and Docker for the CI/CD system's runtime environment to construct, test and deploy.
* Utilized Ansible to Setup/teardown of ELK stack ( Elasticsearch, Log stash, Kibana ) and troubleshoot the build issues with ELK and work towards the solution.
* Implemented a CI/CD pipeline with Docker, Jenkins (TFS Plugin installed), Team Foundation Server (TFS), GitHub and Azure Container Service, whenever a new TFS/GitHub branch gets started, Jenkins, our Continuous Integration (CI) server, automatically attempts to build a new Docker container from it.
* Configured in RDS, MySQL and Dynamo DB to perform basic database administration and manage virtual cloud Resources as required with and overall objective of improving scalability, performance, reliability and highly available fault tolerant cloud infrastructure.
* Designed, wrote and maintained systems in Python scripting for administering GIT, by using Jenkins as a full cycle continuous delivery tool involving package creation, distribution, and deployment onto Tomcat application servers via shell scripts embedded into Jenkins jobs.
* Created Python scripts to Totally automate AWS services which includes web servers, ELB, Cloud front distribution, database, ec2 and database security groups, S3 bucket and application configuration, this script creates stacks, single servers, or joins web servers to stacks.
* Developed automated deployment scripts using Python to deploy war files, properties file and database changes to development server or QA server and Staging/Production server. Developed the automated build and deployment using ant and Jenkins using tomcat.
* Hands on experience in Google Cloud Platform (GCP) services like compute engine, cloud load balancing, cloud storage, cloud SQL, stack driver monitoring and cloud deployment manager.
* Created JIRA issues for prioritizing what is important and cope up with what is going on around the project.

**Environment:** Azure, OpenShift, NetApp, Ansible, docker, Kubernetes, Artifactory, Git, Terraform, Jenkins, GCP, Bash, Python, shell, PowerShell, Linux.

**Client: Raytheon Technologies, Farmington, CT**

**Role: AWS Devops Engineer**  Jan 2018 to Aug 2020

* Involved in performing application deployment to AWS Elastic Bean Stack environment.
* Worked on migration services like AWS Server Migration Service (SMS) to migrate on-premises workloads to AWS in easier and faster way using Rehost "lift and shift" methodology and AWS Database Migration Service (DMS), AWS Snowball to transfer large amounts of data and Amazon S3 Transfer Acceleration.
* Created environment on AWS platform, AWS Hadoop EMR cluster, Kafka Cluster, Cassandra Clusters and implemented system alerts on DataDog.
* Configured AWS IAM and Security Group in Public and Private Subnets in VPC. Created AWS Route53 to route traffic between different regions.
* Configuration tool Installed and configured such as Puppet master / slave and its compute nodes via CLI tools to AWS nodes.
* Used JSON and YAML formatted files from AWS CloudFormation templates to describe the AWS resources and configurations required for the infrastructure.
* Written some Templates for GCP infrastructure as a code using Terraform to build staging and production environments and automated infrastructure provisioning occasionally with Terraform and Packer and even automated the image build process using Packer.
* Used Terra grunt to run terraform scripts to automate instances for EC2 instances that were launched manually before.
* Used Argo CD for security and compliance features such as RBAC (Role-Based Access Control) and audit logs, to manage access to the deployment process and track changes made to the system.
* Managed microservices deployed on Kubernetes clusters, defined the desired state of the microservices in a Git repository and automatically deployed updates to the cluster by using Argo CD.
* 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/Bitbucket and Ansible.
* Implemented a 'server less' architecture using API Gateway, Lambda, and Dynamo DB and deployed AWS Lambda code from Amazon S3 buckets. Created a Lambda Deployment function and configured it to receive events from your S3 bucket.
* Working experience with Harness CI/CD, used for complete continuous delivery solution to automate the process of deploying software to production.
* Worked experience with Apigee Developer Portal and used to support and deploy API policies using Apigee Edge Platform.
* Implement rate limiting for APIs and other services to prevent abuse and ensure fair usage by using Redis.
* Implemented a server less architecture using API Gateway, Lambda, and Dynamo DB and deployed AWS Lambda code from Amazon S3 buckets. Created a Lambda Deployment function and configured it to receive events from your S3 bucket.
* Utilized AWS IoT Core services provide by using the AWS CLI, the AWS SDK for any preferred language, or by calling the REST API directly.
* Configured AWS API Gateway is an AWS service for creating, publishing, maintaining, monitoring, and securing REST, HTTP, and WebSocket APIs at any scale.
* Utilizing API Gateway have created RESTful APIs that are HTTP-based & Enabled stateless client-server communications & Also have Implemented standard HTTP methods such as GET, POST, PUT, PATCH, and DELETE.
* Experience in creating and designing the Terraform templates to create custom sized Resource groups, Kubernetes cluster, Container, blob storages, IOT hub, Event hub. Infrastructure as a code deployment of Web application templates.
* Provisioning of AWS resources (EC2, PVC, SG, ASG, EKS, ECS, S3, Route 53) using CloudFormation and Terraform.
* Implemented a Continuous Delivery pipeline with Docker, and GitHub and AWS.
* Virtualized the servers using the Docker for the test environments and dev-environments needs and configuration automation using Docker containers.
* Highly skilled in the usage of data center automation and configuration management tool such as Docker.
* Created, developed and test environments of different applications by provisioning Kubernetes clusters on AWS using Docker, Ansible, and Terraform.
* Used Ansible and Ansible Tower as Configuration management tool, to automate repetitive tasks, quickly deploys critical applications, and proactively manages change.
* Build out server automation with Continuous Integration - Continuous Deployment tools like Jenkins/Maven for deployment and build management system.
* Configured and deployed instances on GCP environments and Data Centers and building/maintaining Docker container clusters managed bypr, Bash, Git, Docker on GCP (Google Cloud Platform).
* Experienced in implementing observability and monitoring in AWS with Splunk or ELK or similar tools.
* Creating cookbook for provisioning servers like Jenkins, Splunk and Chef-server.
* Scaling SaaS solutions and built SaaS applications using Python and frameworks such as Django & Flask.
* Created functions and assigned roles in AWS Lambda to run python scripts, and AWS Lambda using java to perform event driven processing. Created AWS Lambda jobs and configured Roles using AWS CLI.
* Production support of Apache, PHP, My SQL, Tomcat including installation, configuration, management and troubleshooting. Done security patching.
* Ability in deploying the developed code in a WebSphere, WebLogic, Apache Tomcat/JBOSS.
* Worked on creating different type of indexes based on different collections to get good performance in MongoDB.
* Monitored the servers & applications using Splunk.
* Creating scripts in DSL Groovy which integrates with Jenkins for Automation to create seed jobs.

**Environment:** AWS, Terraform, Docker, Jenkins, Git, Nagios, CentOS, Kubernetes, Java, Maven, ELK, Shell, Bash, Python, Tomcat, Linux, VMware, Splunk.

**Client: Fox Corporation, Los Angeles, CA**

**Role: AWS Devops Engineer Apr 2017- Dec 2017**

* Designed, configured, Troubleshoot and deployed Amazon Web Services (AWS) for a multitude of applications utilizing the AWS stack (Including EC2, Route53, S3, RDS, Cloud Formation, Cloud Watch, SQS, IAM, and EMR), focusing on high-availability, fault tolerance, and auto-scaling.
* Expertise in AWS environment including AWS Storage and content Delivery, Databases, Networking, Management Tools, Security & Identity etc.
* Amazon IAM service enabled to grant permissions and resources to users. Managed roles and permissions of users with the help of AWS IAM.
* Created automated pipelines in AWS Code Pipeline to deploy Docker containers in AWS ECS using services like Cloud Formation, Code Build, Code Deploy, S3 and chef.
* Experience in Deploying and monitoring Microservices an various platform like AWS EKS and Kubernetes, Developed Kubernetes pod definitions, Deployment and used Helm Charts to version control complete deployment strategies.
* Have experience of working with Docker- docker hub, pulling images from Docker hub, running containers based on an image, creating Dockerfile to manage customized containers, exposing a container with port redirect, container volume management, docker inspect, docker commit to capture the file changes/settings into a new image and pushing the image to docker hub.
* Application Deployments & Environment configuration using Chef.
* Build end to end CI/CD Pipelines in Jenkins to build CI/CD Pipeline and code deployment guide for Developers, Testers and Production management.
* Worked on creating various types of indexes on different collections to get good performance in Mongo database.
* Installed Splunk in production servers for logging purposes. Built Splunk dashboards for application monitoring. Configured alerts for operational purpose.
* Configured Webhooks for pushing the commits from GIT to Jenkins and written Groovy scripts to automate

**Client: T.Rowe Price, Owings Mills, MD   
Role: DevOps Engineer** **Nov 2015 –Mar 2017**

* Installation, configuration and administration of Virtual Box and VMware virtual machine for Ubuntu Linux servers.
* Worked On Puppet Enterprise and Puppet Open Source. Installed, configured, upgraded and managed Puppet Master, Agents & Databases. Integration of Puppet with Apache and Passenger.
* Developed pom.xml for the build of the application using Maven.
* Virtualized the servers using the Docker for the test environments and dev-environments needs and configuration automation using Docker containers.
* Setup and Configure the continuous build system using Hudson/Jenkins and running automation Smoke / nightly test suites.
* Installed and Setup MySQL (Master and Slave) Server, Multiple MySQL Instance with different port.
* Experience in Branching, Merging, Tagging and maintaining the version across the environments using SCM tools like Subversion (SVN), GIT (GitHub, GitLab), ClearCase, Harvest and VSS.
* Administered Jenkins, Proposed and implemented branching strategy suitable for agile/scrum, Development in a Fast Paced Engineering Environment.
* Build, deploy, monitor, manage and maintain Cloud applications and the underlying Cloud (e.g., AWS, Docker, etc.) technologies in local and remote data centers.
* Implemented Agile development methodology of software development and prepared detailed design document of each screen.

**Client: Infosys, Bangalore, India.**

**Role: Associate Software Engineer**  **Feb 2013 – Aug 2015**

* Developed use cases, drawn sequence diagrams and class diagrams for the application and responsible for writing program and functional specifications.
* Involved in total Software Development Life Cycle (SDLC) of the application like Requirement gathering, Design, Analysis and Code development.
* Maintenance and performance improvement of existing applications and designed and developed new applications.
* Worked in an agile environment while having Daily standup and Bi-weekly sprint meeting and planning with the team.
* Worked with the Lead Systems Analyst to prepare a Mapping document between UI and Java Request and Responses for each Web Service call.
* Responsible for development of an application from scratch.
* Creating user interface using HTML, CSS, JSP and Java script.

**Education**:

Masters in information technology management from Concordia University St. Paul

May 2017

Bachelors in Electronics and Communication Engineering from Rajamahendra Engineering College, Ibrahimpatnam May 2013