Diagram

Description automatically generated

**Deepthi Bathula**

**Cloud/DevOps/SRE Engineer**

**Gmail**: <bdeepthi37@gmail.com>

**LinkedIn:** [**https://www.linkedin.com/in/deepthi-bathula-b20598286**](https://www.linkedin.com/in/deepthi-bathula-b20598286)

**M**: 737-342-6315

**SUMMARY:**

* A multi-talented, energetic professional with more than 10+ years of experience in virtualization, orchestration, automation, version control, monitoring, and Cloud Computing.
* I have been working as DevOps Engineer for the last 8+ years on Cloud Computing such as **AWS** and **Microsoft Cloud**.
* Hands-on experience with DevOps essential tools such as **Docker, Kubernetes, Jenkins, Terraform, Chef, Puppet, Ansible, Bitbucket, Subversion (SVN), GIT, Jenkins, Ant, Maven, Microsoft Azure,** and **AWS** cloud platforms.
* Certified as **AWS Solutions Architect**, **Microsoft fundamentals,** with expertise in solution architecting applications, running them in Cloud and designing network configurations and security for applications in the Cloud.
* Experience with Configuration Management/Automation tool **Ansible** and worked on integrating **Ansible YAML Scripts.**
* Experience in writing **Recipes** and **Playbooks** to automate deployment process and integration into **Jenkins jobs** for Continuous Delivery.
* Extensively involved in writing **Infrastructure as a code (IaC)** in **Terraform, Azure resource management (ARM), AWS Cloud Formation (CFT),** and created reusable **Terraform modules**for both Azure and AWS cloud environments.
* Experienced with container-based deployments using **Docker**, working with Docker images, Docker hub, and Docker registries.
* Created and deployed **Kubernetes pod** definitions, tags, labels, multi-pod container replication. Managed multiple **Kubernetes** pod container scaling, and auto-scaling.
* Good experienced with monitoring tools such as **AWS** **Cloud** **Watch**, **Nagios**, **Elasticsearch** **Logstash**/**Fluentd** **Kibana** (**ELK**), **Grafana,** and **Data Dog**.
* Experienced in **MAVEN & ANT** as Build Tool for building of deployable artifacts (war, jar) from source code.
* Hands-on experience using **JIRA**, **ServiceNow**, **Confluence**.
* Proficient in AWS Cloud Services such as **IAM, EC2, S3, AMI, VPC, Auto-Scaling, Security Groups, Route53, ELB, EBS, ECR, EMR, RDS, SNS, SQS, DynamoDB, Lambda CloudWatch, CloudFormation, CloudFront, Snowball, and Glacier.**
* Worked on Azure resources such as **AKS**, **ACS**, **VPN**, **Azure** **VM**, **VMNet**, **VMSS**, **Azure** **AD**, **Azure** **Data** **Services**, **Azure** **Storage**, **Azure** **Databases (SQL & Cosmos DB**), **Azure** **Backup**, **Azure Site Recovery, Azure Batch, API Management, Azure App Services**.
* In-depth knowledge of **Red Hat Enterprise Linux (RHEL)**, **CentOS**, **Ubuntu** LTS servers.
* Experienced managing release planning and branching strategy of GIT and worked on creating repositories in GITHUB for multiple applications configured GIT repositories in CI setup in Jenkins and Injected **Groovy** scripts in Jenkins for dashboard and customized email triggers.
* Extensively worked on **Jenkins** for continuous integration and for End-to-End automation for all build and deployments by writing **Groovy** scripts.
* Experience in writing **XML, Shell scripts, Python** scripts to automate the deployments.
* Experience in managing on-premises infrastructure, automating deployment processes, and optimizing system performance.

**TECHNICAL SKILLS**:

|  |  |
| --- | --- |
| Cloud computing | AWS, Microsoft Azure, Google Cloud Platform |
| Scripting Languages | Python, Perl, Shell, Groovy, Bash, Ruby, YAML |
| Web/Application Servers | Nginx, Web Logic, Apache Tomcat, JBOSS, WebSphere, Jetty, Apache2 |
| Automation Tools | Jenkins, Git LAB, Bamboo, GitOps |
| Networking | DNS, DHCP, TCP/IP, SMTP, LDAP, SAMBA |
| Build Tools | ANT, Maven, Gradle |
| Configuration Tools | Ansible, Chef, Puppet |
| Bug Tracking Tools | Service NOW, JIRA |
| Repository Manager Tools | Nexus, JFrog |
| Operating Systems | RHEL, CentOS, Ubuntu, Windows |
| Databases | MySQL, Oracle, MongoDB, PostgreSQL, DynamoDB, Snowflake |
| Monitoring Tools | Nagios, Cloud Watch, Splunk, Grafana, ELK, Data Dog |
| Version control tools | Git, GitHub, SVN, Bitbucket |
| Virtualization/Container | Docker, Kubernetes, EKS, AKS, GKE |

**CAREER HISTORY:**

**July 2023 – Present**

**Client: JPMC**

**Role: SRE**

* Experience working with automation tools like Docker, Kubernetes to implement the End-to- End Automation.
* Expertise in alert & monitoring scripts for applications & servers using Python and/or Shell Script.
* Experience in migrating and implementation of multiple applications from on premise to cloud using AWS services like EC2, S3, Glacier, EC2, VPC, RDS, CloudTrail, EKS Function.
* **Experience in providing technical support for production 24x7.**
* **Experience in production support and operations.**
* **Experience in Monitoring (Splunk and Data Dog and Geneos).**
* **Installing/maintaining/Administering software on Unix Linux,** Windows servers.
* Working closely with Development, QA, Product Management, and Production Ops teams to make sure Product Releases on-time with quality.
* Experience in Agile Methodologies and processes.  
  Strong Automation, problem-solving skills, and ability to follow through to completion.

**May 2021 – June 2023**

**Client: TetrusCorp Solutions**

**Role: Lead Cloud/DevSecOps Engineer**

* Created, tested and deployed an end-to-end CI/CD pipeline for various applications using Jenkins and plugins as the main integration server for Dev, QA, Staging and prod environment.
* Git administration involving access provision for branches and GIT repositories. Creating and managing git repositories and give access to authorized developers and workers on artifactory.
* Setup Jenkins server and created a Master Slave configuration and built jobs to provide Continuous automated builds based on polling the GIT and integrated GIT with Jenkins to automate code checkout process with the help of Jenkins plugin.
* Responsible for building /deploying consistently repeatable build/deployments to prod and non-prod environments using Jenkins & Build pipelines, Maven and ANT.
* Setup and implementation of Ansible for automation/configuration management process.
* Written docker files to create the docker images.
* Creating and mapping of docker volumes from host machine to containers.
* Deployed container-based applications on ECS, working with Docker images, Docker Files and Docker Registries.
* Created/Managed reproducible builds of the Kubernetes applications, manifest files and releases of helm packages.
* Provisioned Kubernetes clusters with tools like terraform. Deployed applications on Kubernetes clusters using helm charts.
* Managed IAM roles, created users, groups for different teams in AWS, enabled MFA for all IAM users.
* Configured AWS S3 and Nexus with Jenkins for storing and versioning of artifacts.
* Created AMI Backups using AWS Backup
* Utilized Python BOTO3 module for automating few application deployments in AWS EC2 instances and backing up EC2 instances using lambda function.
* Build Customized Amazon Machine Images (AMIs) & deployed these customized images based on requirements.
* Experienced on Git Version Controlling with different branches, tags, and mergers.
* Configured various CloudWatch dashboards for alarms, notifications using CloudTrail.
* Configured Elastic Load Balancers with EC2 Auto Scaling Groups.
* Integrated Ansible plugins with Jenkins to provide automation, continuous integration & Continuous Deployment (CI/CD) through Jenkins and wrote Ansible Playbooks to automate Ansible target nodes using YAML scripting.
* Written Groovy scripts to automate the configuration of Jenkins jobs, including creating new jobs, updating job configurations, and setting job parameters and secrets.
* Written Python scripts to totally automate AWS services which includes web servers, ELB, Cloud Front distribution, database, EC2 and database security groups and application configuration, this script creates stacks, single servers, or joins web servers to stacks.
* Implement and manage CI/CD pipelines using AZURE DevOps i.e., Azure pipelines to automate software delivery and deployment
* Configure and manage azure resources using IAC principles to automate software delivery and deployment.
* Work on backup and disaster recovery strategies, including Azure Backup and Azure Site Recovery.
* Administer Azure DevOps Implement Organization, Projects, Teams, permissions and Security settings.
* Integrate security tools into the CI/CD pipeline to detect and remediate security threats.
* 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 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.
* Worked on GKE Topology Diagram including masters, slave, RBAC, helm, kubectl, ingress controllers GKE Diagram including masters, slave, RBAC, helm, kubectl, ingress controllers
* Created projects, VPC's, Subnetwork's, GKE Clusters for environments Dev, QA and prod using Terraform Created projects, VPC's, Subnetwork's, GKE Clusters for environments.
* Design, implement, and maintain the VPN infrastructure. Configure and manage VPN gateways, routers, and firewalls.
* Define security policies and protocols for the VPN. Monitor and analyze VPN traffic for unusual activities and security breaches.
* Provide support to end-users for VPN-related issues, including installation and configuration of VPN clients.
* Collaboration with Vault administrators to define security policies, to integrate with IAM systems.
* Integration of applications with Vault for secret retrieval. Periodic reviews and audits of vault configurations and policies.

**Sep 2020 – Apr 2021**

**Client: EY**

**Role: Sr. DevOps/Jenkins Admin**

* Deployed & maintained highly scalable microservices architecture using Amazon/Azure Kubernetes services (EKS/AKS) as a front-end orchestrator for Docker containers.
* Managed Kubernetes charts using Helm and created reproducible builds of the Kubernetes applications, templatized Kubernetes manifests, and provide a set of configuration parameters to customize the deployment and managed releases of Helm packages.
* Terraform was used along with Packer to create custom machine images, and once the infrastructure was provided the software dependencies were then installed using Ansible.
* Worked with version control tools such as GIT and Bitbucket. Comprehensive knowledge of source controller concepts including branches, tags, conflicts, merges, and Branching Strategies.
* Collaborate with development teams to design and implement reliable, scalable architectures.
* Develop and maintain tools for deployment, Monitoring, and operations to improve efficiency and scalability.
* Automate repetitive tasks to reduce human errors.
* Set up comprehensive monitoring systems to track system health, performance.
* Configure and manage alerting mechanisms to notify the team of critical issues promptly.

**Aug 2017 – Aug 2020**

**Client: Accenture**

**Role: DevOps Consultant/Atlassian Admin/Jenkins Admin**

* Deployed containerized applications using AWS Far gate Spot Type for optimizing cost to application teams.
* Build multi-cloud deployments to Azure and AWS using a combination of Terraform and Azure Resource Manager (ARM) templates, CI/CD with Jenkins.
* Written reusable Templates for provisioning AWS using Terraform as (IaC) to build staging and production environments, and automated end-to-end transit hub connectivity resource deployment in AWS via Terraform.
* Wrote Docker files from scratch to build docker images and to create containers using Docker engine for deploying micro services-oriented environments for scalable applications.
* Wrote Helm charts from the scratch and performed helm dry runs. Created reproducible builds of the Kubernetes applications, templatize Kubernetes manifests, designed configuration parameters to customize the deployment and manage the release of Helm packages.
* Created Kubernetes clusters hosted on bare metal and managed them using the Kubernetes command-line interface. Worked with Scheduling, deploying, managing container replicas onto a node using Kubernetes by writing helm charts.
* Worked on rolling updates using deployment in Kubernetes to implement Blue/green Deployment, Canary Deployment strategies to maintain less downtime. Using Ansible as a Configuration Management, for updating and installing applications in AWS servers.
* Setup Jenkins CI-CD pipelines for continuous build & deployment and integrated Junit, Veracode and SonarQube plugins in Jenkins for automated testing, Vulnerability Scan and Code quality check.
* Involved in setting up JIRA as a defect tracking system and configured various workflows, customizations, and plugins for JIRA bug/issue tracker and used JIRA for bug tracking, issue tracking, and project management.
* Involved in testing of services using SOAP/REST services using SOAP UI, groovy script.
* Implemented rolling updates using deployments on AWS Elastic Kubernetes Service (EKS) to reduce downtime during application updates.
* Deployed and managed containerized applications using EKS and ECS on AWS. Deployed multiple services in EKS using helm charts. Configured the RDBMS and NOSQL tools such as MySQL, DB2, PostgreSQL, MongoDB.
* Designed Continuous Integration (CI), Continuous Delivery (CD) pipelines using Jenkins and used Spinnaker to deploy the changes by writing groovy scripts and shell scripts and automated daily tasks on multiple environments by triggering the jobs using webhooks.
* Created and maintained the Python deployment scripts for Tomcat web application servers.
* Worked on Python scripting to deploy the applications using Ansible across Linux servers.
* Used Python, 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.

**June 2013 – Aug 2017**

**Client: Tecra Systems**

**Role: Linux Admin/DevOps Engineer**

* Develop, Implement, and maintain CI/CD pipelines to automate and streamline the software development, testing and deployment process.
* Develop automation scripts to improve efficiency and reduce manual, repetitive tasks.
* Used scripting languages like Python, Bash, shell scripting.
* Create and maintain shell scripts to automate tasks, system administration and troubleshooting
* Mainly responsible for keeping the servers up and running as well as providing direct user support for any technical issues related to systems.
* Administer user accounts, groups, and permissions, managing access control and security policies.
* Install, configure and manage Linux servers.
* Build and Release Java applications to Dev, Test, UAT, Pre-prod and prod environments.
* Worked on Git to maintain source code in Git and GitHub repositories.
* Worked on Atlassian tools like Jira, Confluence and bitbucket.
* Maintained and administered Git source code.
* Created branches, labels and performed merges in Git.
* Performed all necessary day-to-day Git support for different projects.
* Communicated failed builds and error logs to QA and Developers to debug and troubleshoot problem areas.
* Configured Jenkins as a build engine to build and deploy applications to DEV, QA, UAT and PROD environments.

**EDUCATION**:

B. Tech, Universal college of Engineering and Technology