Ashwani Kumar V

Senior Cloud Engineer

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SUMMARY

10+ years of experience in IT field which includes 5 years in handling AWS Cloud environments, Build and Administer Micro-Services architecture through Docker, Kubernetes and AWS EKS.

Proficiency in working in DevOps lifecycle management environment, creating build & release pipelines, Infrastructure Automation & Configuration Management in multiple environments.

Analytical, committed, persistent individual and reliable team member. Continuously learning and acquiring new knowledge and skills.

KEY SKILLS

Linux/UNIX Administration Bash Scripting, **Python Scripting** Windows Server Operating **Systems** AWS Cloud, Boto3 Terraform Ansible, Packer Git/Git Hub, Bitbucket, Maven, JFrog, Sonarqube Jenkins, CI/CD Integration Docker, Docker Compose, Kubernetes, AWS EKS, Helm Charts, Prometheus & Grafana CloudWatch, IIRA

AWS Cloud Administration, Terraform & Ansible Automation with DevOps & DevSecOps Lifecycle

Professional Experience

Senior Cloud Engineer, Visionet Systems Pvt. Ltd. Bengaluru Date: July 2021 – July 2022

Job Profile: Build and Release Management, Deployment Automation & AWS Administration.

Cloud Engineer, TCS, Hyderabad

Payroll: Ivytel Technologies Pvt. Ltd. Bengaluru,

Date: January 2018 - July 2021

Job Profile: AWS Administration & DevOps Engineer

Module Lead, Mindtree LTD. Hyderabad, Date: February 2015 – December 2017

Job Profile: O365 Migrations & Messaging Administrator

Client: Microsoft, Hyderabad

Employment History

Roles and Responsibilities

- 1. Responsible for **fault-tolerance**, **high-availability**, **scalability**, **resilient** and **security** on AWS Infrastructure and platform.
- 2. Good understanding and implementation of **Microservices Concepts** and **Best Practices**.
- 3. Responsible for **Integration of CI/CD Pipelines** with automated build and test systems.
- **4. Automating the AWS Infrastructure** and Platform Deployment with **Infrastructure as a Code Terraform**.
- 5. **Collaborate with development teams** to clarify the infrastructure requirements.
- 6. Build and maintain tools for **deployment**, **operations** and **monitoring**.
- 7. Responsible for **Production Deployment** using **Multiple Deployment** Strategies.
- 8. Support and **troubleshoot scalability**, **high availability**, performance, **monitoring**, **backup and restoration** of different environments.
- 9. Able to **carry out POCs** to make sure that suggested design technologies meet the requirements.
- 10. Evaluate **new tools, technologies** and processes to improve the speed, efficiency and **scalability of CI/CD environments**.
- 11. Used **Jira as a Change Management**, Work Management, Scrum Agile tool. Experience with the **Project Management roles** and terms such as **Backlog, Epic, Stories, Tasks and Sprints**.

Skills and Experience

- 1. Embedding **Security** at every step of SDLC with **DevSecOps Tools**.
- 2. Strong experience in **AWS Cloud Native Services** in Compute, Storage, Database, IAM, Monitoring, Security vectors.
- 3. Configured **AWS Services** related to **Compute**, **VPC**, **IAM**, **Storage**, **Databases and Container services such as ECR**, ECS, EKS.
- 4. Used **Terraform to build** instances and other AWS services into multiple

Istio Service Mesh

Traffic Management
Security Management
Authentication & Authorization
Certificate Management
Observability with Prometheus
and Grafana
Service Discovery
Visualizing in Kiali Dashboard
Distributed Tracing with Jaeger
In-Place & Canary Upgrades

DevSecOps Tools

Talisman
PIT (Mutation Tests)
SonarQube (SAST)
Trivy, Dependency Check
OPA Conftest
KubeSec
Integration Tests
OWASP ZAP (DAST)
Kube-Bench
Falco, KubeScan

Projects

- Deployed 3-Tier Architecture through Terraform & AWS Console.
- Automated Golden AMI through Packer & Ansible.
- Implemented Terraform Modules for the resources and services in AWS Cloud.
- Implemented end-to-end CI/CD Pipelines for Java & Node.js applications.
- Automated installation of DevOps tools through Ansible.
- Automated Day-2 DevOps tasks through Python Scripting.
- Implemented Dynamically Increment Application version in Jenkins Pipeline.
- Automated Kubernetes Deployment Rollout in the CI/CD Pipeline.

Academics

Education History

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CERTIFICATIONS

AWS Certified Solutions Architect -Associate

- environments such as Dev, Staging and Prod and **Integrating with Ansible** to run Ansible Playbooks using Terraform Provisioners to **automate provisioning and configuring** of server to deploy containerized applications.
- 5. Standardized the **Terraform modules** for all the resources in AWS Cloud. This helped in **reducing the code time** and re-usability of the modules.
- 6. Automated the **creation of Golden AMI** through Packer and used **Ansible for Application Configuration.**
- 7. Extensively **used Ansible** to **install and configure** all the DevOps tools. Also **Dynamically configured the inventory file** to avoid manual input of IP address in the host file.
- 8. Used **Jenkins Single & Multibranch Pipelines** to integrate all Micro Services builds out to the Docker/ECR registry and then **deployed to Kubernetes/ECS/EKS**, and managed the application with various **Kubernetes Objects** also **integrated** with **Jira and Slack** to send build and Deployment state information.
- 9. **Optimized Jenkins container** configurations to mount docker runtime as a volume, fixing permissions on docker.sock to run docker commands.
- 10. Used **Terraform to automate** the EKS Cluster and **integrated Terraform in CI/CD Pipelines** to automate provisioning of Servers.
- 11. Experience in **administrating Kubernetes** and a good understanding of **manifest management with Helm** along with expertise in Ingress Controller.
- **12. Experience in Istio Service mesh** for Traffic Management, Security, observability, Service Discovery.
- 13. Identify the **Security Gaps** and closing it by configuring all the **Security best practices** of the **AWS and Kubernetes infrastructure**.
- **14. Automated DevOps tasks** such as System Checks, Adding Tags, Monitoring and Remote Administration, Backup and Restore, Scheduled tasks, Clean-up, Data Visualizations, Send Notifications, CI/CD related tasks **through Python Scripting**.
- **15. Configured ELK/EFK ElasticStack** for deep search and data analytics, fluentD for centralized logging, log enrichment and parsing and Kibana for powerful and beautiful data visualizations.
- 16. Used **Jira as Change Management** and **Scrum Agile tool**. Worked on Scrum Sprint Activities and able to deliver within the sprint duration.
- **17. Configured Prometheus Server** and its components such as Grafana, Alert Manager, ServiceMonitor, Prometheus Rules to monitor all Cluster Nodes, K8S Components, Microservices Applications and Redis Data broker.
- **18. Successfully upgraded** the Kubernetes and Jenkins by following the best practices and took the **backup of ETCD** database and performed timely restore drills.
- **19. Troubleshooting** Kubernetes workloads, CI/CD Pipelines, EC2 Instances, Observability, Docker Images etc.
- **20. Performed Cost Optimization** with Kubecost to avoid overspending on the resources.

Looking Forward To Learn

- 1. Azure Cloud, Azure DevOps
- 2. GCP
- 3. CKA, CKS Certification
- 4. New DevOps and DevSecOps tools that emerge during my DevOps Engineer Journey.