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, and Build and Administer Micro-Services architecture through 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, JIRA

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

Professional Experience

Senior Cloud Engineer, Visionet Systems Pvt. Ltd. Bengaluru
Date: July 2021 – July 2022
Job Profile: Build and Release Management, Deployment Automation, and Kubernetes Administration.

Cloud Engineer, TCS, Hyderabad
Date: January 2018 – July 2021
Job Profile: AWS Administration, Infrastructure Automation & Configuration and DevOps Engineer

Module Lead, Mindtree LTD. Hyderabad,
Client: Microsoft, Hyderabad
Date: February 2015 – December 2017
Job Profile: O365 Migrations & Messaging Administrator

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. Build and maintain tools for **deployment, operations** and **monitoring**.
6. Responsible for **Production Deployment** using **Multiple Deployment** Strategies.
7. Support and **troubleshoot scalability, high availability**, performance, **monitoring**, **backup and restoration** of different environments.
8. Able to **carry out POCs** to make sure that suggested design technologies meet the requirements.
9. Evaluate **new tools, technologies** and processes to improve the speed, efficiency and **scalability of CI/CD environments**.
10. 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 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

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

CERTIFICATIONS

AWS Certified Solutions Architect - Associate

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 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. **Integrated AWS RDS with EKS Cluster** to Persist the application data.
12. **Experience in administrating Kubernetes** and a good understanding of **manifest management** with Helm along with expertise in Ingress Controller.
13. **Experience in Istio Service mesh** for Traffic Management, Security, observability, Service Discovery.
14. **Identify the Security Gaps and closing** it by configuring all the Security **best practices of the AWS and Kubernetes infrastructure**.
15. **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**.
16. **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**.
17. **Used Jira as Change Management and Scrum Agile** tool. Worked on Scrum Sprint Activities and able to deliver within the sprint duration.
18. **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**.
19. **Successfully upgraded** the Kubernetes and Jenkins by **following the best practices** and took the backup of ETCD database and **performed timely restore drills**.
20. **Troubleshooting Kubernetes workloads**, CI/CD Pipelines, EC2 Instances, Observability, Docker Images etc.
21. **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 Certifications
4. New DevOps tools that emerge during my DevOps Engineer Journey.