ARUN IYAPPAN

isarun20@gmail.com |9047361924 | https://www.linkedin.com/in/arun-iyappan-bb283a193/

Objective:

Versatile Cloud and DevOps Engineer, equipped with a strong foundation in AWS, Azure, and CI/CD, backed by 3+ years of practical experience. Objective is to leverage my expertise to design, build, and deploy innovative cloud-based solutions that optimize business operations and improve productivity.

Education:

- **B. Tech (Information Technology)** - Government College of Technology (2017-2021) – **FIRST CLASS -** 8.14GPA

Skills:

- **Public Cloud:** AWS & Azure
- **Infrastructure as Code:** Terraform, ARM Template, Cloud Formation
- **Containerization:** Docke
- **Orchestration:** Kubernetes
- **Package manager:** Helm
- **CI/CD:** AWS Developer tools, Azure DevOps, Jenkins
- **Source code management:** Git, GitHub, Bit Bucket, Code Commit, Azure Repo
- **Monitoring:** Azure Monitor, AWS Cloud Watch, ELK
- **Programming language:** Python
- **Scripting:** Bash
- **Configuration Management Tools:** Ansible
- **Operating System:** Windows, Linux, Unix

Certifications:

- AWS Solutions Architect Associate (SAA-CO3)
- Azure Administrator (AZ-104)
- Terraform Associate (003)
- Certified Kubernetes Administrator
- Azure Fundamentals (AZ-900)

Experience:

Organization: Deloitte

Designation: Consultant- Cloud & DevOps (SEP 2023-Present)

AWS Experience:

- Designed and implemented cloud-based infrastructure solutions, including creating VPCs, subnets, security groups, S3 buckets, Lambda functions, EC2 instances, load balancers, and database storage solutions such as RDS, DynamoDB, Document DB, and Neptune DB.
- Improved monitoring services using CloudWatch and SNS to ensure high availability and performance. Achieved a 15% improvement in system performance through CloudWatch monitoring.
- Created EC2 instances with customized configurations to meet the specific needs of various applications, such as setting up appropriate instance types, storage volumes.
- Enhanced data resilience through the implementation of automating snapshot schedules and retention policies. This involved configuring monthly, weekly, and daily backup schedules, ensuring data integrity and reducing potential downtime.
- Ensured the security of sensitive data by encrypting volumes using KMS and implemented appropriate key management policies to control access and usage of the keys. Managed IAM users, user groups, and roles, assigning policy permissions as necessary.

Organization: Bosch Global Software Technologies Pvt Ltd.

Designation: Software Engineer - Cloud & DevOps Engineer (JULY 2021-SEP 2023)

AWS Experience:

- Deployed EKS using terraform and installed load balancer controller to deploy ingress load balancer and exposed services. Configured SQS, SES, PINPOINT to send and receive messages from the application.
- Created Event Bridge rule to trigger the Code Build Pipeline and invoking Lambda Functions at 1 day time intervals and added notification mechanism using SNS to share the build status of the pipeline.
- Procured domain through Route53 and added hosted zone by creating records & created load balancer and attached SSL certificates which procured through ACM.
- Configured Cloud front, WAF and invalidated using Lambda. Executed cost optimization measures, resulting in a 20% reduction in overall cloud infrastructure expenses by decommissioning and modification of unused resources.
- Proposed automation for frontend and backend deployment using Code Commit, Code Build& Code Pipeline. Automated application deployment for ECS containers using Code Build, Code pipeline with rollback features.

- Amplify and Implemented Cross Account Concept to access the base code from another account. Utilized Cross Account Access to build images in other accounts using Code Build from the primary account which results in reduction of image build time by 50%.

Azure Experience:

- Designed and implemented cloud-based infrastructure solutions, including the creation of Virtual Networks (VNETs), subnets, network security groups (NSGs), and storage accounts on Azure platforms. Proficient in working and deploying the Infrastructure as a Service (IaaS), Software as a Service (SaaS), and Platform as a Service (PaaS) models in azure.
- Ensured high availability and data protection by restoring databases from backups and configuring failover and replication protocols for critical systems. Developed PowerShell scripts to automate the snapshotting of VMs for backup and disaster recovery purposes.
- Ensured the security and optimal functionality of over 40 virtual machines by implementing a rigorous patching schedule using Azure Update Management tools. Achieved a 99% compliance rate for timely application of security patches, resulting in a significant reduction in vulnerability exposure and enhancing overall system reliability.
- Streamlined the deployment process by automating UI and backend deployment with Azure Pipeline, building images from code stored in Azure repositories which saves time around 4hrs.
- Collaborated with the team to create infrastructure using Terraform scripts, contributing to a more efficient and scalable environment. Monitored the cloud infrastructure using Azure Monitor and configured Action Group for mail alerting systems.
- Configured App Service Plan and WebApp to deploy ASP.NET Application in Linux distribution using Azure DevOps Release pipeline. Created Azure Container Registry to store the docker image of ASP.NET and implemented continuous delivery for application deployment in app service with 95% success rate.
- Created Organizations, Project in Azure DevOps and guided developers to migrate the source code from one organization to another organization. Configured Self hosted agent in Azure DevOps Pipeline to create infrastructure using Terraform.
- Implemented Azure Load Balancer to distribute incoming traffic across multiple virtual machines for improved performance and availability and Azure Application Gateway to provide application-level load balancing, SSL termination, and web application firewall (WAF) capabilities.
- Utilized Azure Kubernetes Service (AKS) to deploy, manage, and scale 8 containerized applications using Kubernetes orchestration. Achieved a 30% improvement in application scalability, reducing response times during peak usage.
- Configured Azure Functions to build and deploy serverless applications, allowing for efficient execution of code on demand and Implemented Azure Automation to streamline and automate recurring tasks and processes within the cloud infrastructure.
- Experienced in utilizing real-time protection features of Microsoft Defender to proactively monitor and block known malware and malicious activities, ensuring the security of systems and networks.
- Utilized Azure Security Center to monitor and manage the security posture of the cloud environment, including threat detection and vulnerability assessment. Implemented EISA Compliance policy using Terraform and enforced it in the project environments.
- Utilized Azure Key Vault to securely store and manage cryptographic keys, secrets used in the cloud infrastructure.
- Configured Azure Virtual Machine Scale Sets, enabling efficient scaling and management of multiple virtual machines. Improved resource utilization by dynamically adjusting the number of instances based on demand, resulting in a 25% reduction in infrastructure costs.

Organization: Bosch Global Software Technologies

Designation: Internship Trainee (MAR 2021-JUN 2021)

- Collaborated on AWS, Azure, and Terraform projects during internship, contributed to the deployment and management of services.

Services

AWS

- VPC, Subnet, Route table, IGW, NAT, Security Groups, NACL
- EC2, ECS, EKS, ALB, NLB, ECR, API
- Guard duty, Inspector, Config Rules, WAF, KMS
- S3, RDS, Document DB, DynamoDB, NeptuneDB
- SNS, SES, SQS, Lambda, Secret manager
- Route53, Cloud front, Amplify, ACM
- Cloud watch, Log group, Event bridge, CloudTrail
- Code commit, Code build, Code pipeline

Azure

- VNET, Subnet, NSG
- VM, VMSS, Application Gateway, Load balancer, AKS
- Storage account, SQL, Cosmos, ACR, Key vault, Redis
- API Management, App Service Plan, App Service, Function app
- Log Analytics, Azure Monitor, Application Insights