

Jonathan Kerk

<https://jonathankerk.com>
+65 9117 1996 / contact@jonathankerk.com

Executive Summary

DevOps Engineer with focus on AWS cloud infrastructure, responsible for building new and optimizing existing cloud resources with Terraform, Git and Gitlab. Sole contributor in managing security compliance, operational costs, BAU operations and optimization of 4 AWS accounts.

Experienced in Level 2 Support and development lifecycles. Practical scripting knowledge in Python and Bash. Proficient in Windows and Linux server administration. Freelance experience as Microsoft 365 and Google Workspace administrations for small businesses.

Education

University of Wollongong	Oct 2018 –Mar 2021
<i>Bachelor of Computer Science (Digital Systems Security) (Part-time)</i>	

Skills & Competencies

Programming Languages – Python, Java, Bash, Microsoft Batch
Tools – Linux, Git, Gitlab CI, Terraform, AWS CLI, Zabbix, Docker

Certifications

AWS Certified Solutions Architect (Associate) SAA-C02	Issued May 2022
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Work Experience

S&P Global <i>DevOps Engineer</i>	<i>Jul 2022 - Present</i>
<ul style="list-style-type: none">• Leading infrastructure team, hosting monthly infrastructure reviews and leading discussions for improvements and optimizations• Sole contributor in maintenance of 4 AWS Accounts, including security compliance, tagging, financial forecasting with score of 95 points based on internal metrics for all accounts• Creation of custom Docker agent images for Mend and Sonarqube• Integration of Product source code to corporate-hosted Mend and Sonarqube from CI pipelines• Solutions design and implementation of cross region service for multiple AWS based products, enabling trade reporting to Hong Kong Trade Repository (HKTR)• Implementing reusable Terraform modules for various AWS resources such as IAM Group, Users, Roles, Auto Scaling Groups, Elastic File System, Transfer• Technical documentation for existing and new infrastructure stack	

- Engagement with external vendors and corporate Cloud team on new infrastructure building blocks
- Provided technical rectifications for on-premise client, including NGINX reverse-proxy configurations and security related flags

IHS Markit (Acquired Mar 22) / S&P Global

Jul 2021 – Jul 2022

Software Developer

- Contributor in Delivery team to implement enhancements and defect fixes to Spring Boot application
- Rotation-based Level 2 Support for Trade Reporting application in Spring Boot, providing in-depth troubleshooting, root cause analysis and resolution to Level 1 Support and clients
- Participated in Agile based development cycles, acting as Sprint lead for development sprints on rotation basis
- Part of infrastructure team creating and enhancing existing AWS resources using Terraform and AWS CLI
- Cost analysis of cloud billing to reduce monthly overheads, resulting in 30% cost savings in AWS operational costs by rightsizing and optimizations
- Redesigning of AWS Security Groups using Terraform modules to introduce security segregation of outbound connectivity
- Executing estate-wide deployments in for over 80 servers in UAT and Production environments
- Security and compliance fixes for AWS resources based on AWS Security Hub and internal compliance directives
- Created AWS SSM automation for refreshing AWS SES SMTP credentials for servers utilizing Postfix relay design
- Designed and implemented weekly scheduled pipeline to build custom EC2 AMIs for applications using Gitlab CI and Hashicorp Packer
- Developed automation in Lambda to identify and update AWS Auto Scaling Groups with updated AMIs built by scheduled pipelines
- Responsible for Availability-Zone scoped Disaster Recovery exercise in AWS, including drafting of proposals, execution and post mortem reports
- Authoring technical documentations for Day 2 operations for infrastructure resources in product

DXC Technology

Mar 2021 – Jul 2021

Java Developer

- Part of delivery team to provide enhancements to Spring application
- Performed on-site remediation of Oracle database records with SQL Procedures
- Creation of Docker database images for local integration testing for developers

Associate Engineer

- Deployment, maintenance and administration of ESXi hosts and virtualized application servers
- Administration of Microsoft Active Directory with Group Policy enforcements
- Network configuration and troubleshooting for IPv4 networks
- Providing technical consultancy and troubleshooting for on-premise systems
- Developed system report generation automation initiative in VBScript and Microsoft Batch, resulting in reduction of maintenance time cost by 90% for legacy Windows systems
- Developed Python GUI application for customizing client-based application on Windows based machines, reducing time taken for client configurations by 90% for Windows 7 systems
- Creation of golden Windows 7 images for client machines and estate-wide deployments to 700 laptops over local network
- Initiation of improved workflow by introducing on-premise Jenkins server and JFrog Artifactory for automated builds
- Assessment and maintenance of legacy Java codebases for security vulnerabilities based on HPE Fortify Static Code Analyzer