Fred Koch

linkedin.com/in/fredkochiv

Summary

Seasoned security engineer with 20+ years of experience in hardware and software design, implementation, and security across diverse computing environments. Specializing in Cloud Security Posture Management (CSPM) with deep expertise in UNIX/Linux systems, storage solutions, and enterprise backups. Proven leadership in driving technology innovation and cross-functional collaboration, with a strong commitment to advancing organizational security posture and technological excellence.

Experience

Chewy - Remote
Staff Security Engineer
2021 - Current

- **Enhanced Cloud Security Framework:** Led the strategic implementation of Cloud Security Posture Management (CSPM) using Wiz, significantly bolstering our organizational security posture. Engineered a comprehensive solution that streamlined incident response, integrating seamlessly with Jira, Snowflake, and Splunk, and scripted over 150+ automation rules, leading to a marked improvement in incident handling efficiency.
- **Advanced Container Security:** Spearheaded a Proof of Concept (PoC) for container runtime protection across EKS and ECS, evaluating solutions like Prisma, Lacework, and Deepfence. This initiative improved our container security and was integral in the decision-making process for adopting new security technologies.
- **Fostered Organizational Security Awareness:** Initiated and led cross-departmental workshops and a company-wide town hall to educate on the benefits of CSPM, significantly enhancing operational security awareness and embedding best practices across the company. My efforts in fostering collaboration and understanding have contributed to a more security-conscious culture at Chewy.
- **Innovated Reporting and Visibility Tools:** Developed custom dashboards and project views, improving oversight of our cloud environment and streamlining reporting for audits. This innovation has enhanced our ability to monitor and report on security posture effectively.
- **Pioneered Metadata and Integration Initiatives:** Led a metadata initiative to enhance tracking of application name tags and their associated ownership, facilitating a more organized and efficient approach to managing our cloud resources. This effort laid the groundwork for potential integration with Backstage, aiming to streamline application management and ownership tracking.

UKG / Ultimate Software - Weston, FL - Remote
Linux Security Engineer
2015 - 2021

- **Transition of Log Collection Infrastructure:** Helped spearhead the migration of ELK log collection clusters from bare metal to Kubernetes, overseeing the management of over 10TB of daily log ingestion. This pivotal transition significantly enhanced the SOC's operational visibility and agility, supporting the processing of over 100,000 events per second across multiple locations.
- **Implemented and Optimized Monitoring Solutions:** Rolled out Grafana Cloud and Prometheus for centralized monitoring, achieving unmatched visibility across data centers. This implementation facilitated a more proactive approach to infrastructure management and security oversight.
- **Advanced Security and Automation:** Developed a suite of automation scripts and configurations using Bash, NXLog, Salt, and PowerShell, streamlining the security infrastructure's responsiveness and efficiency. Contributions included automating NXLog configurations in SaaS environments and refining Salt configurations to improve Kubernetes cluster setup, OS tuning, hardening, and user administration.
- **Enhanced Email Security and Deliverability:** Drove improvements in email security and deliverability by working closely with customers to implement best practices and standards, including DMARC/DKIM and enhanced SPF record enforcement. These efforts significantly bolstered the security posture of email communications.
- **Pioneered GKE Deployment for Log Ingestion:** Initiated the deployment of log collection clusters into Google Kubernetes Engine (GKE), extending the log ingestion capabilities to cloud-based environments. This forward-thinking strategy was designed to accommodate the growing security needs and enhance the scalability of the organization's infrastructure.

EMC - Florida
Pre-sales Systems Engineer, NAS Specialist SE
2013 - 2015

- **Drove Sales and Customer Success:** Exceeded sales quotas by 153% in 2014 by leveraging strategic solution selling and fostering deep relationships with key enterprise accounts. Recognized as a trusted advisor, added five new logos in the first year through impactful proof of concept (PoC) demonstrations and tailored NAS solutions.
- **Expertise in NAS Technologies:** Specialized in Isilon and ECS solutions for South Florida Enterprise accounts, enhancing customer engagement through regular strategic reviews, needs assessment, and service requests. Excelled in designing and configuring bespoke NAS solutions, significantly improving customer satisfaction and operational efficiency.

World Fuel Services - Doral, FL
UNIX/Linux, Storage, & Backup Systems Engineer
2010 - 2013

- **Innovation in Licensing and Hardware Management:** Revolutionized IT operations by adopting container technologies, which drastically reduced WebLogic licensing costs through strategic resource management. Led a comprehensive hardware refresh and a global transition to NetBackup, markedly enhancing performance and disaster recovery capabilities.

LexisNexis Group - Boca Raton, FL
Senior UNIX Systems Engineer
2006 - 2010
- **Leadership in System Migration and Efficiency:** Orchestrated a critical migration from Solaris 8 to Solaris 10, employing automation via Jumpstart to streamline server installations and enhance system monitoring with Zenoss Core. Significantly improved development and QA environments' agility and cost-effectiveness with pioneering use of container technology.

Carnival Cruise Lines - Doral, FL
Senior UNIX Systems Engineer
1999 - 2006
- **Advanced IT Operations and Disaster Recovery:** As a Senior UNIX Systems Engineer, I was instrumental in advancing IT operations, overseeing 80 SUN UNIX servers. Developed and maintained shell scripts for monitoring and statistics, boosting system reliability and performance. Established and rigorously tested system backups, fortifying disaster recovery processes and ensuring data protection continuity.
- **Advanced Connectivity for Remote Employees:** One of two people that implemented and rolled out VPN across the company.
- **Skilled in Edge Technology:** Managed BIND, Sendmail, and Apache DMZ services for the company. Implemented IronPort for marketing email for improved delivery rates and reputation.

Education

Florida International University - Miami, FL
Bachelor of Science, Computer Science

Skills & Certifications:

- Expertise in Cloud Security Posture Management (CSPM), UNIX/Linux, Storage Solutions, Enterprise Backups
- Proficient in Kubernetes, Bash, Elasticsearch, SaltStack, Grafana, Prometheus
- Certified Kubernetes Administrator (CKA)
- Strong leadership in cross-functional team management, technical presentations, and stakeholder engagement