Technical Skills

Cloud AWS, GCP

OS Linux, Solaris, Windows, Vmware

Database PostgreSQL, MySQL, RDS

Scripting Bash, Python

Networking Routing & Switching, Wireless, VOIP, VPN

Security Backtrack/Kali Linux, Nessus, Retina, Firewalls

Other Kubernetes, ECS, Apache, Docker, Git, Nginx, Terraform, Packer, Inspec

Experience

2020-Present Distinguished Engineer, Security & Compliance Lead, SRE, BROADCOM/VMWARE, Remote.

- Architect and Security & Compliance lead for VMware Developer Platform leading management of 200+clusters and 190k+ containers across cloud and on-prem environments.
- Led team to achieve and/or maintain SOC2, PCI DSS, ISO 270XX, FedRAMP High, IL5, and other compliance certifications.
- o Designed privilege elevation system for Kubernetes user accounts.
- o Designed Cloud Native Change Management system (Patent Pending)
- Developed Slack and Gitlab user and repository management and enforcement applications to ensure proper access control and removed admin access from over 95% of the team. Used across multiple teams in VMware
- Created Secure Code Development Best Practices and Compiler and Binary security guides used across teams in VMware.
- o Authored mentoring program for VMware Developer Platform team.

2019–2020 Senior DevSecOps Engineer, CIPHERTRACE, Remote.

- o Migrated EC2 and ECS instances to EKS and GKE Kubernetes clusters.
- o Migrated 20 repositories to a monorepo, allowing for faster development and atomic commits.
- Deployed over 20 different types of cryptocurrency nodes to ec2, docker and kubernetes. Managed over 300 blockchain nodes.
- Managed over 700 EC2 instances, 120 Lambdas, 6 ECS clusters, 5 EKS clusters, 3 GKE clusters across 15 aws regions.
- Setup and maintained multiple AWS services including EC2, Lambda, S3, EFS, RDS, DynamoDB, ElastiCache, Organizations, Cloudwatch, CloudTrail, Config, Systems manager, CodePipeline, CodeBuild, CodeDeploy, EMR, ElasticSearch, Data Pipeline, and several other services.
- o Reduced AWS spend by over 130k/month while minimizing workload reduction.

2017–2019 Director of IT Operations, Questis, Charleston, SC.

- o Moved Questis SAAS platform from Heroku to AWS ECS and docker and HA architecture
- o Designed Node and Python Microservice architecture with Kong API Gateway.
- ${\color{blue}\circ}$ Designed and implemented CI/CD pipeline with Jenkins and Gitlab
- o Automated Infrastructure with Terraform, Packer, Ansible, Inspec
- o Migrated 9 repos to a monorepo with full git history
- o Scaled Production application from 1100 users to over 130,000 users

2016–2017 Lead Systems and Network Engineer, CACI INTERNATIONAL, Charleston, SC.

- Scripted a complete infrastructure deployment of AWS using Terraform including multiple regions and auto-scaling best practices
- Developed training material and provided cross training to other engineers on how to read and understand Terraform scripting
- o Developed and configured CACI lab environment supporting 6 DoD projects and 350+ users
- Developed openvpn web interface for VPN access for multiple projects

2014–2016 Lead Systems and Network Engineer, STRATEGIC OPERATIONAL SOLUTIONS, Charleston, SC.

- Design and implement Operating system and Application solutions supporting eDTRM for Joint Chief of Staff
- Design and Maintain DevOps environment supporting eDTRM, CBP, NAVFAC and other development team supporting over 450 virtual servers
- o Migrate 250+ users from Exchange to Google Apps for Work, reducing monthly cost by 50%
- Scaled infrastructure from 1 server with 8 virtual machines to 40 servers with over 450 VMs
- o Implemented version control, document repository, central authentication, logging and update servers.

2013–2014 Sr. Systems Integrator, LIFE CYCLE ENGINEERING, Charleston, SC.

- o Provided Linux and Weblogic expertise to further project initiatives and goals
- o Identified several memory leaks in application and assisted development teams with resolution
- o Co-authored Weblogic performance and HA optimizations plan, reducing downtime and improving stability
- Developed multiple scripts for automation of application deployment allowing for faster recovery and error reduction

2007–2013 Lead Systems Engineer, SPAWAR, Charleston, SC.

- o Developed and maintained DoD First Net-Centric Intelligence Integration Backbone
- o Maintained Solaris 10 environment including patching, hardening and accrediting 30+ servers
- o Interfaced with multiple agencies including NSA, CIA, DHS, and DoD to achieve DCGS intelligence sharing
- Migrated DCGS-N from Solaris 10 Sparc to Rhel 5 Virtual Machines; migrated Oracle databases, Jboss Application servers, Authentication servers and other supporting servers
- Completed DCGS-N Block 1.5 hardware/software upgrade, enabling virtualization, high availability, and redundancy
- Improved system security 65% via Red-Hat Enterprise 5.x hardened installation, including STIG, DCID6/3, DoDI8500.2, and NSS-1253 recommendations and best practices

2011–2012 Subject Matter Expert, RED LAMBDA, Remote.

- Designed and Implemented QA website for submission/tracking of test requests, results, change requests, and mind mapping
- Assessed requirements for customer integration and conducted gap analysis regarding pre-established big data solution providers
- o Engineered API testing infrastructure of Metagrid stress testing
- o Authored security test plan for Red Lambda, Inc. for increased logical and physical security
- Developed MetaGrid requirements analysis for Ret. General Clapper of USDI (Under Secretary of Defense for Intelligence) and DNI (Director of National Intelligence)

2006–2007 Firewall/Network Tech, L3 Communications, Shaw AFB.

- o Developed automated upgrade for 50+ remote Sidewinder G2 firewalls
- Authored installation material for Symantec Mail Security and Solaris 9 for External Mail Gateways
- o Engineered local update program for 200+ BlueCoat SG proxy appliances
- o Created Anti-Virus Definition Monitoring script, providing real-time definition status for 20+ remote sites

2002–2006 Systems/Network Tech, U.S. AIR FORCE, Worldwide Venue.

- \circ Engineered and configured multiple management servers, increasing storage 96% and speed 87%
- o Authored fiber test plan, 20,000+ strands of fiber; boosting troubleshooting and planning effectiveness 90%
- o Implemented plan to locate and eliminate rogue wireless access devices reducing vulnerabilities by 30%
- Project Lead for Moody AFB \$2.8M wireless project, installing 250+ key devices and delivering \$50K in cost savings
- o Maintained 60+ Taclane KG-175 and KIV-7 bulk encryption devices supporting 5,000+ users

Education/Certifications

- 2020 Amazon AWS Certified DevOps Engineer Professional
- 2020 Amazon AWS Certified Solutions Architect Professional
- 2019 Amazon AWS Certified Solutions Architect Associate
- 2019 Amazon AWS SysOps Administrator Associate
- 2013 VMware VCA Data Center Virtualization (VCA–DCV)
- 2008 Certified Information Systems Security Professional (CISSP)
- 2007 Microsoft Certified System Engineer (MCSE)
- 2007 Cisco Certified Network Associate (CCNA) exp