Louis Kowolowski
Curriculum Vitæ

Professional Summary

Network Reliability Engineer who is self-motivated, collaborative, hands-on, and detail-oriented. Knowledgeable of complicated system troubleshooting, implementation, and continuous operation in coordination with team members. Possess the ability to assess issues and produce solutions through software product research, analysis, design, development, testing, documentation, and maintenance. Areas of Expertise include: Strong networking knowledge: TCP/IP, IPSec, VPN, NAT, Routing Protocols, 15+ years experience in troubleshooting and triage of technical issues in a fast paced environment, to support customers.

⌂ | Pacific North West
📡 | +1 (541) 690-8649
✉ | guile-arcades0p@icloud.com
⌨ | https://www.cryptomonkeys.com

Education

BS in Computer Security and Information Assurance
Computer Science
Southern Oregon University

Work Experience

Principle Engineer at FlightAware/Collins Aerospace (Network Reliability)   January 2023 – Current

Summary: Developed tooling around automation and templating. Reduce the impact of network attacks. Amplify the effectiveness of coworkers through education and training.

- Mentor and advise Operations and Engineering on network best practices and understanding of concepts that facilitate graceful product deployments

Sr. Site Reliability Engineer at FlightAware/Collins Aerospace   February 2021 – January 2023

Summary: Developed tooling around automation and templating. Reduce the impact of network attacks. Amplify the effectiveness of coworkers through education and training.

- Develop tooling using Python/NetMiko, and Juniper's PyEZ, allowing code changes to be pushed to the network, or automation of repetitive tasks
- Develop Python and Jinja tooling for easier device deployment conforming to vendor best practices.
- Taught a second network training course for coworkers: covered Layers 1-4, common protocols, device configuration, and collecting and analyzing packet captures.
- Develop internal processes for doing device upgrades resulting in zero or near zero downtime
- Develop documentation to facilitate non-network engineers ability to perform network tasks with out network engineer oversight
- Define network SLIs and SLOs.
- Integration with DDoS vendor to reduce attack impact to near zero. Develop internal dashboard to provide visibility on when attacks happen, what the magnitude and scope are.

Site Reliability Engineer at FlightAware (Collins Aerospace)   February 2016 – February 2021

Summary: Increased resiliency with redundancy of network choke points. Amplify the effectiveness of coworkers through education and training.

- Mentor for new-hires. Work with coworkers to document operations tasks, processes, SLAs and internal systems to streamline on-boarding of new employees. Decrease the time new-hires were productive and joining the on-call/triage work to 3mo.
- Develop and taught a curriculum for a network training course for coworkers: covered Layers 1-4, common protocols, device configuration, and collecting and analyzing packet captures.
- Troubleshoot network performance with tcpdump to find TCP window scaling, or resend issues. tuning the network stack, leading to a 300-500% increase in performance.
- Transition data center routing to BGP. No outage observed
- Migrated site-2-site traffic to a private wave service, increasing redundancy and reducing monthly overages.

VP Technical Operations at Silent Circle, AG **FEBRUARY 2013 – APRIL 2015**

Summary: Lead the operational company vision of a privacy-friendly information service. Managed 4 globally distributed teams consisting of 12 people across IT/Operations, Release Engineering, Quality Assurance, and IT Help Desk.

- Increase customer privacy by creating new Data Center locations in Switzerland, where they have the strongest privacy laws in the world.

- Facilitate the migration to a modern Data Center architecture which reduced the dependence on any single piece of hardware; making maintenance both less time consuming and less impactful to production systems.

- Primary point of contact for all issues relating to production and engineering systems.

- Managed Release Engineering on creation and management of infrastructure related to software product builds and releases to mobile app stores for Apple, Google, and Baidu.

- Oversaw source code audits, releases, and binary analysis by 3rd party vendors.

- Part of the decision-making team with the CTO and VP of Engineering, that defined policy which placed QA in a decision making role for software releases.

- Provide daily operational review and quality control for voice and text services.

- Initiate the collection and organization of asset related information

- Create and implemented procurement process and policy.

- Oversaw the day-to-day activities of supporting headquarters and regional offices.

- Initiate the formalization of on and off-boarding for employees and contractors, including equipment and software training.

Network Architect / Network Engineer at Silent Circle, LLC **JULY 2012 – FEBRUARY 2013**

Summary: Architected and deployed a secure network spanning multiple continents. Facilitate development and deployment of end-to-end encrypted VoIP, text messaging, and email.

- Architect and maintained the company's data centers consisting of network routers, firewalls, and switches using both IPv4 and IPv6 for production, and development/testing.

- Deploy alerting and trending for metric collection and analysis to facilitate capacity planning and fault detection.

AWARDS / CERTIFICATIONS / MISC.

2023	**Architecting on AWS**
	AWS Training and Certification
2015	**Oregon Notary**
	Commission: 944365 Expiration: 2019
2012	**IPv6 Certification – Sage Level**
	Hurricane Electric
2010	**PGP Certified Technician**
	Symantec/PGP Corp.
1993	**Eagle Scout**
	Troop 27

COMMUNICATION SKILLS

User Groups

2013-2015	Periodic speaker at Hack the People
2012-2015	Periodic speaker at PLUG

Please refer to my Linkedin profile for a more complete list of work experiences along with recommendations.