

# NEIL HANLON

Senior Network / DevOps / Systems Engineer

## Contact

neil@shrug.pw  
+1 978 432 9449

## Languages

Neutral Northeastern  
American English  
(Fluent)  
Sarcasm

## Systems Engineering

Experienced with  
Content Delivery  
Networks,  
Secure Application  
Architecture,  
Network Architecture,  
Amazon Web Services,  
Containerization,  
Microservices

## Networking

BGP, OSPF, Juniper,  
Linux Networking,  
Cisco (ASA, R+S),  
Arista (EOS, BigSwitch /  
Cloud Fabric),  
Citrix Netscaler (ADC),  
SD-WAN: SilverPeak

## Programming

Experienced in Python,  
(POSIX) Bash, Puppet,  
Ansible.  
Some experience with  
Terraform, Lua, Ruby,  
Golang, php, others

## Tools

git, bash/zsh,  
GNU/Linux tooling,  
Microsoft Windows  
Server

Network and systems engineer, Linux and FOSS enthusiast. I enjoy complex problem solving and learning how to do new things in interesting ways with fun people

## Professional Experience

Since 2021 **Senior Network Engineer** Concord, MA

*KAYAK Software Corporation*

- Responsible for managing and executing orders and renewals with vendors
- Routinely review and assess internal and external network capacity to ensure continuity of service
- Create and maintain tools to manage provider maintenances, schedule downtime, and alert team members to potential conflicts that could cause unexpected network degradation
- Facilitate management of Network Hardware Lifecycle to ensure equipment is being used efficiently and is retired when end of life
- Engage with Security team to audit, patch, and secure network devices and appliances for critical vulnerabilities
- Create and update documentation on network architecture and procedures
- Communicate with other teams regarding impactful maintenance, service interruptions, etc.
- Act as an escalation point for Operations and NOC teams for network and other infrastructure components

Since 2020 **Team Lead, Infrastructure | Founding Board Member** Remote

*Rocky Enterprise Software Foundation (RESF) - Rocky Linux*

- Volunteer to co-lead team of volunteers rebuilding Red Hat Enterprise Linux for the open source community after Red Hat / IBM's announcement to prematurely deprecate and end support for CentOS Linux.
- Work with partners and sponsors, alongside the community, to procure and supervise the various infrastructure related tools, services, and hosting platforms
- Help guide and direct the RESF with the Advisory Board, by communicating the opinions and requirements of the community
- Maintain and configure systems and services for Rocky Linux and the RESF, respond to outages and alerts for critical infrastructure

2018-2021 **Network Engineer** Concord, MA

*KAYAK Software Corporation*

- Inherited KAYAK's full production and corporate networks, comprised of two datacenters and over 14 offices
- Replaced aging Juniper core switch with new spine/leaf network in both datacenters running BigSwitch Cloud Fabric software
- Upgraded edge routers in all data centers to replace old, unstable hardware
- Added a POP to Boston, MA, enhancing AWS Direct Connect access and eliminating redundant transit and peering options
- Helped connect data centers and POPs with private network interconnects, improving performance for inter-data-center tasks
- Oversaw and implemented a "Personally Identifiable Information (PII) Bubble" to cordon off sensitive data from other areas of production environments, by deploying

- Maintained and configured radius and saml proxies for network equipment and MFA access
  - Wrote and collaborated with other teams on software tools and infrastructure automation to enhance deployment of services
- 2016–2018      **DevOps Engineer**      Concord, MA  
*KAYAK Software Corporation*
- Became full-time on the Operations team and worked to identify and take over tasks performed by other team members to rebalance workloads
  - Helped maintain Fastly CDN configuration (custom varnish configuration). Implemented load balancing between origins, api-driven traffic redirection, and A/B / experiment testing on the edge
  - Assisted in migration of legacy CDN configuration into source controlled Continuous Integration/Continuous Delivery (CI/CD) pipeline with staging and production release points and testing
  - Participated in 24/7 on call rotation for KAYAK Operations responding to production-impacting events
  - Setup and maintained systems for on-call rotation and weekly meetings for knowledge sharing
  - Managed migration from PagerDuty to OpsGenie, including ongoing maintenance of integrations, schedules, reporting, and Alert/Incident workflows
  - Collaborated with Architecture teams to improve site reliability through diagnosing and remediating operating system (Linux, Windows, Others) and hypervisor-level resource restrictions
- 2015–2016      **DevOps Engineer - Co-Op**      Concord, MA  
*KAYAK Software Corporation*
- Worked with Operations team on configuration management and automation tasks
  - Wrote proof of concept virtual machine provisioning library integrating with XenServer XAPI and configuration management to kickstart CentOS virtual machines, including a web interface to launch and manage virtual machines
  - Lead implementation of Apache Airflow with Analytics Engineering teams to improve and streamline billing and reporting analytics
  - Assisted with several large site/system outages, engaging with external vendors for troubleshooting and debugging processes.
- 2014–2015      **Junior Linux Administrator**      Boston, MA  
*Department of Technology Services, Wentworth Institute of Technology*
- Configured and maintained applications for the Math and Physics departments to provide students homework and other assignments
  - Was resource for Network Operations team for Linux-based applications and troubleshooting
  - Acted as liaison between Network Operations and Help Desk support

## Education

- 2013-2017      **B.S. in Computer Science**      Boston, MA  
*Wentworth Institute of Technology*
- Minor in Computer Networking
  - Major coursework: algorithms, compiler design, object oriented programming, logic, assembly language, math, physics, software design/architecture
  - Minor coursework: computer networking, routing and switching, security, wireless