BEN HALL

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Network Engineer · Network Reliability and Automation

Network engineer at an MSP that takes a customer from proposal through equipment, design, and field delivery. Ten or more enterprise customers, roughly 50,000 nodes, in retail, banking, restaurant franchise groups, and senior living. My largest account runs about 2,500 SD-WAN sites and 45,000 nodes. I own its monitoring, its cutover processes, and the NOC training.

EXPERIENCE

Network Engineer — 01/2025 – Present

Corporate IT Solutions — Boise, ID

NOC Engineer, 01/2025 to 05/2026, and sole Prisma SD-WAN engineer for about a year. Network Engineer, 05/2026 to present.

- Built iontoolkit, a Go client for Prisma SD-WAN that CIS adopted and built its own tooling on top of. 230 sessions a minute. Public under Apache 2.0.
- Found 20,673 access points missing from monitoring and traced the gap to a scope change never applied retroactively. Automated static NAT provisioning on the production peering router with Python and NAPALM, removing hundreds of hours of manual work.
- Designed the AT&T cutover process and moved it off engineering. The NOC runs three to five a day on my runbooks and training.
- Cut per-site downtime from 30 minutes to 2 on the ION 1200-S pilot visits, against a 5,000 unit refresh. The network architect wrote the config copy tooling; I own design, lab, and deployment.
- Took over a stalled cellular failover rollout as its third engineer. Forty tests in two days split two failure modes the team was treating as one. The runbook went to tier 2 for review and training.
- Built a configuration drift platform polling 293 switches against a baseline. Still running.
- Found the remediation API call for a vendor defect that took roughly 2,500 retail sites down, which the vendor could not locate. The customer's SRE team ran it, because we did not hold the API rights.
- Led incident response on a wiped ION HA pair at a bottling plant. Site restored in about two hours, against four to six for a technician dispatch.
- Root caused chronic back office login failures at a franchise group to about 9,600 weekly-rotating vendor addresses that the Meraki layer 7 model cannot hold. Wrote the change request against PCI DSS v4.0.1.
- Diagnosed cellular failover failures to a carrier-assigned /32 leaving the FortiGate with no default route. Proved it across six sites.
- Inventoried the seven systems live on a senior living network and challenged a cutover risk assessment with no downtime figure and no rollback. The customer cancelled the cutover.

System Administrator — 10/2022 – 01/2025

Emmett Independent School District 221 — Emmett, ID

- Ran 4,300 Active Directory accounts and 3,000 user accounts across nine sites, on a technical team of two. Rebuilt the district's user Group Policy end to end.
- Replaced ChromeOS staging that took three interns about a week. My pipeline finishes in about two days, at 250 to 300 devices a year.

- Built a GCP pipeline auditing endpoint compliance weekly against Google Workspace and SQL Server, alerting on its own failures.
- Managed 95 Juniper EX switches on Mist templates. Retired my own NetBox rollout when Mist absorbed the same data.

SKILLS

Networking

Palo Alto Prisma SD-WAN (Strata Cloud Manager) • Juniper SRX and EX (Junos, Mist) • Cisco Meraki (MS, MX, MR, MG) • Fortinet (FortiGate, FortiSwitch, FortiManager, FortiAnalyzer, FortiAP, FortiExtender) • Aruba Instant • UniFi • VMware VeloCloud • cellular WAN (Cradlepoint, Inseego, Meraki MG) • Cisco IOS

Protocols and design, Layer 2 and Layer 3

BGP • TCP/IP • NAT and CGNAT • VRFs • VLANs • IPsec • HA and failover • filter based forwarding • DNS

Automation

Go (Golang) • Python • Bash • NAPALM • Ansible • REST and WebSocket APIs • Git • CI/CD (GitHub Actions, GitLab CI)

Monitoring and source of truth

SolarWinds Orion • NPM and NCM • SNMP polling • NetBox • Mist templates

Infrastructure

Linux and Linux networking • packet capture and analysis (tcpdump, Wireshark) • Proxmox • Docker • PostgreSQL • ZFS • GCP

CERTIFICATIONS

Juniper Networks Associate: Junos (JNCIA-Junos), DevOps (JNCIA-DevOps), and Mist AI (JNCIA-MistAI), all expiring 10/2028.

CompTIA: Security+, expiring 05/2027.

EDUCATION

B.S. Cloud and Network Engineering, Western Governors University, expected 12/2026