

Jacob Gantz

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Network Engineering | Data Center Administration | Technical Troubleshooting

Core Competencies

Network Design & Architecture | LAN/WAN Management | Cisco Routing & Switching | Firewall Security (ASA, Palo Alto) | Wireless Networks (WLC, WAPs, Switches) | VPN & Remote Access | Network Monitoring (Wireshark, SolarWinds) | Cloud Networking (AWS, Azure) | Network Automation (Python, Javascript) | VLANs & Subnetting | BGP/OSPF Routing Protocols | Fiber & Ethernet Cabling | Disaster Recovery | High Availability (HSRP, VRRP) | Documentation & Compliance (NIST, ISO)

Education & Certifications

- Bachelor's Degree in Cyber Security | Old Dominion University | Ongoing
- AAS in Information Technology | Northern Virginia Community College | May 2022
- A+ from CompTIA | Apr 2018

Key Value Offerings

- Designed, configured, and maintained LAN/WAN infrastructure to support scalable enterprise operations across multiple sites.
- **Infrastructure Modernization:** Spearheaded upgrades of legacy network systems to modern, scalable architectures, improving performance, reliability, and future-proofing IT operations.
- **End-to-End Network Lifecycle Management:** Led full lifecycle support for network infrastructure, including design, deployment, monitoring, and decommissioning of networking hardware and services.
- **Cross-Platform Integration:** Enabled seamless integration between on-premise networks and cloud services (e.g., AWS, Azure), supporting hybrid IT environments.
- **Security-First Networking:** Implemented multi-layered security architectures with firewalls, NAC, VPNs, and intrusion detection/prevention systems to meet compliance and reduce risk.
- **High Availability & Redundancy Planning:** Designed and maintained redundant network paths and failover systems, achieving near-zero downtime across mission-critical services.

- **Strategic Capacity Planning:** Analyzed network trends and usage to forecast future bandwidth and hardware needs, supporting business growth and digital transformation.
- **Automation & Efficiency:** Utilized scripting tools (e.g., Python, Ansible) to automate configuration management, reducing manual tasks and human error.
- **Vendor and Stakeholder Collaboration:** Liaised with equipment vendors, ISPs, and cross-functional IT teams to coordinate network projects and ensure seamless service delivery.
- **Performance Optimization:** Continuously monitored and tuned network performance using tools like SolarWinds, Cisco Prime, and Wireshark to identify bottlenecks and enhance throughput.
- **Documentation & Compliance:** Maintained detailed network diagrams, change logs, and SOPs to support audits, knowledge transfer, and regulatory compliance.

Professional Experience

DuPont — Network Engineer (Oct 2024 – Present)

- Designed, configured, and maintained LAN/WAN infrastructure to support scalable enterprise operations across multiple sites.
- Implemented and managed firewalls, VPNs, and IDS/IPS systems to ensure secure and uninterrupted network access.
- Performed network performance tuning and capacity planning to optimize throughput and minimize downtime.
- Collaborated with cross-functional teams to troubleshoot complex network issues, reducing incident resolution time by 50%.
- Automated network configuration and monitoring using scripting tools using Python, and javascript, improving efficiency and reducing manual errors.
- Configured and deployed Cisco switches, Wireless LAN Controllers (WLCs), and Wireless Access Points (WAPs); performed installation and testing of fiber optic and Ethernet cabling to ensure high-speed, reliable connectivity across network infrastructure.

OSBot — Script Writer/Cyber Security Engineer (Sept 2014 – Present)

- Utilized **Splunk** to develop real-time alerting dashboards and custom queries for log analysis, anomaly detection, and incident correlation.
- Conducted in-depth network reconnaissance and vulnerability assessments using **Nmap**, identifying open ports, services, and misconfigurations.

- Designed and executed controlled penetration tests with **Metasploit**, simulating attack vectors to expose security gaps and improve system hardening.
- Automated data collection and threat intelligence parsing through custom scripting, integrating outputs from tools like Nmap and Metasploit into centralized Splunk dashboards.

Iron Bow Technologies, Chantilly — Network Administrator (Mar 2020 – Oct 2024)

- Administered and maintained LAN/WAN infrastructure, including configuration and monitoring of routers, switches, and firewalls to ensure optimal network performance.
- Provided tier-2 and tier-3 technical support, resolving escalated network issues and minimizing downtime across enterprise environments.
- Managed user access controls, VLAN configurations, and DHCP/DNS settings to ensure secure and segmented network traffic.
- Conducted routine network health checks, firmware updates, and system backups as part of proactive maintenance and disaster recovery planning.

Amazon Web Services (AWS), Manassas — Datacenter Operations (DCO) (Sept 2019 – Dec 2019)

- Deployed, maintained, and decommissioned AWS-hosted infrastructure hardware, including EC2 rack servers, networking components, and storage arrays in compliance with AWS operational standards.
- Executed rack and stack operations, fiber/Ethernet cabling, and diagnostics for AWS data center environments, ensuring physical connectivity and service uptime.
- Partnered with AWS control center and infrastructure teams to troubleshoot hardware issues and replace failed components, contributing to SLA adherence and system resilience.
- Maintained detailed inventory records and followed AWS security protocols and standard operating procedures to ensure compliance and data center integrity.

Worldwide Tech Services — Mobile Repair Technician (Feb 2019 – Sept 2019)

- Diagnosed and repaired hardware issues on laptops, desktops, and printers from Dell, Lenovo, and HP, including motherboard replacements, LCD repairs, and keyboard swaps.
- Performed component-level troubleshooting and replacement of internal parts such as RAM, SSDs, cooling systems, and power supplies across multiple OEM devices.
- Calibrated and serviced various printer models, addressing print quality issues, paper feed errors, and firmware updates to ensure optimal performance.
- Maintained OEM certifications and adhered to strict repair protocols and documentation standards, ensuring warranty compliance and quality assurance.