

Graham Paasch

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SENIOR NETWORK ENGINEER

10 years of professional experience—primarily in ISP/service-provider environments—with additional enterprise, data-center, and lab engagements. Deep Juniper expertise (MX, SRX; passed all prerequisites for and took the JNCIE-SP exam), strong Cisco background (ACI fabrics, Catalyst, ASR 9k, Nexus, CCNP-RS), and on the job experience with Python automation. Lab-based familiarity with Cisco Viptela SD-WAN, Palo Alto/Panorama, and F5 BIG-IP; studied AWS, Azure, and GCP networking fundamentals.

CORE SKILLS & TECHNOLOGIES

- **ISP / Service-Provider Networks:** Juniper MX/SRX, Nokia OLT/BNG, GPON/ONU, DWDM, SONET
- **Cisco:** ACI underlay/overlay (40 CE credits), Catalyst, ASR 9k, IOS, Nexus
- **SD-WAN (Lab):** Cisco Viptela (GNS3 homelab)
- **Automation & Scripting:** Python (Netmiko, Paramiko, PyATS), basic Ansible familiarity; REST/JSON/XML/YAML
- **Routing & Switching Protocols:** BGP, OSPF, MPLS, LDP, VXLAN/EVPN, HSRP/GLBP, PIMv2, IGMP
- **Security & VPNs:** IPsec VPNs, RADIUS/TACACS+; lab-only with Palo Alto NGFW & F5 BIG-IP
- **Monitoring & Tools:** SolarWinds, SevOne, Splunk; automated Visio diagram generation
- **Cloud Fundamentals:** Studied AWS, Azure, GCP networking (no production migrations)
- **Other:** Git/GitHub, CI/CD pipelines, network documentation & standards

PROFESSIONAL EXPERIENCE

Insight Global (Contract at Google – GFiber Lab) | Austin, TX

QA Automation Software Engineer (Networking) Jan 2024 – Oct 2024

- Fiber to Home service provider lab network: Juniper, Nokia, OLT, BNG, ONU, GPON, XGSPON
- PyATS automation framework
- Python network automation: Ixia - ixnetwork_restpy, Polatis - SCPI, Netmiko, Paramiko, XML, JSON, YAML, Object Oriented Design with PyATS aetest
- Setup Github and helped implement collaboration strategies and practices: Code review via pull requests, branching with Jira, rebasing and merging

- Gave slide presentations of project progress and technical demonstrations using Google Meetup
- Fully Remote.

Apex Systems (Contract at Amazon) | Austin, TX

Network Engineer III Nov 2022 – Apr 2023

- Gathering, verifying, and uploading data to AWS version control repositories.
- Configuring Linux hosts and Juniper TOR devices in a DevOps style approach. Utilizing scripts written in Python.
- Fully remote.

Hays (Contract at Arm) | Austin, TX

Network Administrator Jun 2022 – Nov 2022

- Rack and stack an internal Cisco ACI (application centric infrastructure) lab. Completed the physical setup in the data center, used the GUI work on the configuration, earned 40 Cisco CE (continuing education) training credits.
- Proactively monitored network alerts and incidents, ensuring efficient resolution and minimizing downtime.
- Collaborated as part of a global team in a "follow the sun" environment, ensuring seamless transition of work across different time zones.

Hewlett Packard Enterprise | Austin, TX

Senior Network Engineer Jun 2020 – May 2022

- Hired to troubleshoot issues with spanning tree loops. Help change to a stacked design in a star topology to mitigate the risk of loops.
- Supported the management network internal to a legacy organization super computer, through implementation, configuration, architecture and design using GIT and Bitbucket to ensure a collaborative ecosystem.
- Delivered thought leadership to key stakeholders to support the design and architecture of the Cray Shasta Supercomputer management network.
- Designed and implemented a temporary patch fix architecture that enabled the sharing of resources between two super computers, enabled sharing of resources across supercomputers despite critical global chip shortage, preventing the halting of Research and Development work by other teams.
- Used Python to generate configuration based on excel spreadsheet scraping, simplifying a complicated process of applying configuration to four main varieties of supercomputer, each of which could in two different sets of management network gear, and were of varying sizes.
- Fully remote.

Spectrum Enterprise | Austin, TX
Network Developer II Aug 2019 – Jun 2020

- Full scale Agile Development team, with sprints, stand-ups, backlog refinements, demos, and retrospectives.
- Based off the book The Phoenix Project: A Novel About IT, DevOps, and Helping Your Business Win.
- Trained, developed, and deployed Blue Planet MDSO Multi-Domain Service Orchestration to leverages SDN and NFV to provide end-to-end, zero-touch service lifecycle automation.
- Added Cisco ASR 9K device automation to MDSO.
- Wrote Python automation to collect cpu and memory statistics from a server to help troubleshoot regularly occurring downtime.

Spectrum Enterprise | Austin, TX
Network Engineer II Jul 2017 – Aug 2020

- Reporting to the Network Engineering Manager, responsible for planning, designing and deploying network infrastructure, leading configuration, and troubleshooting of complex network technologies.
- Designed and supported the configuration of command restrictions in Cisco ACS and prevented trunking outages.
- Delivered training, mentorship, and guidance to 20 team members to enhance expertise and best practices.
- Contributed to the development of web-based JavaScript forms, utilized Git and GitLab to increase organizational consistency, communication while ensuring accurate network device configuration among team members.
- Led configuration and troubleshooting of Metro Ethernet Forum (MEF) services and complex network technologies.
- With a focus on ARP, packet structure, TACACS failover, default gateways, vlans and management configurations, re-established remote connectivity using creative and innovative processes and methodologies.

Charter Communications | Madison, WI
Network Specialist I May 2015 – Jul 2017

- Responsible for supporting the development and implementation of network automation for scale and predictability leveraging common languages and configuration as code, while providing leadership to teams and customers.
- Delivered advanced troubleshooting, customer support, guidance and best practices to on-site network technicians, leading instruction on RFC2544 testing units, final configurations application, as well as setting up of testing circuits.

- Developed Visio automation utilizing Python; supported the development of a server side application utilizing PHP to parse JSON payloads. Built an API to deliver drawings in a vsdx format, reducing a multi-hour process to 10 minutes.
- Ensured the integrity of high availability network infrastructure to provide maximum performance for users.
- Selected to support the recovery of a bug inflicted core router for critical government networks. In partnership with technicians, utilized failover capabilities to reboot device, led successful resolution without losing any traffic.
- Served as a primary project resource; captured and communicated overall use of various technologies, implemented operating systems and utilized advanced networking protocols including MP-BGP, MPLS, OoS, IS-IS and OSPF.
- Partnered with the Principal Engineer to design and coordinate the turn-up of a provider edge modular router.

EDUCATION & CERTIFICATIONS

- **Assoc. IT, Network Specialist** – Madison Area Technical College, 2015
- **CCNP Routing & Switching** – Exp. Sep 2022
- **JNCIP-SP** – Exp. Sep 2022 (attempted JNCIE Service Provider)