

Graham Paasch

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SUMMARY

A results-focused and detail-oriented Network Development Engineer with 9 years of extensive experience leading engineering, operations, and support of complex and mission critical network. Proven record of consistently delivering effective and innovative solutions to complex problems. Verified ability to provide infrastructure that is secure, reliable, and high performing, with a focus on delivering smooth experiences for stakeholders and clients using lead edge technologies.

EXPERIENCE

Insight Global Contract at Google/GFiber, 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

Apex Systems Contract at Amazon, Network Engineer III

Nov 2022 - Apr 2023

In my role at Amazon via Apex Systems, I utilized my industry experience to support the development and implementation of digital solutions. As a Network Engineer III, my role was pivotal in configuring new equipment in the datacenter, and contributing to a culture of automation.

Key Responsibilities & Achievements:

- 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.
- Leveraging my deep understanding of IP networking fundamentals and application of IP protocols to ensure seamless network operations.
- Utilize my strong network analysis fundamentals and troubleshooting skills to identify, diagnose, and resolve complex network issues promptly.
- Exhibit expertise in a wide range of protocols and technologies, including DWDM, T1/DS1, DS3, SONET (OC3, OC48), 802.2/3, 802.1d VLANs/STP, IPv4 & IPv6, TCP, BGP, OSPF, HSRP/GLBP, PIMv2, IGMP, LDP, TACACS, IPSEC & VPNs, netflow, DNS, and HTTP.

Hays Contract at Arm, Network Administrator

Jun 2022 - Nov 2022

In my role as a Network Administrator at ARM via the staffing firm Hays, I contributed to the maintenance and enhancement of the global IT infrastructure as a part of the Technology Operations Services Group (TOSG). I left this role early in favor of a fully remote position.

Key responsibilities and achievements:

- 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.
- Provide robust network support for global infrastructure, handling approximately 70% operational support and 30% project work.
- Proactively monitor network alerts and incidents, ensuring efficient resolution and minimizing downtime.
- Consistently maintain accurate and up-to-date monitoring, site documentation, and configuration.
- Collaborate as part of a global team in a "follow the sun" environment, ensuring seamless transition of work across different time zones.

Hewlett Packard Enterprise (NYSE:HPE), Senior Network Engineer

Jun 2020 - May 2022

- Responsible for supporting network capacity planning, throughput, performance and scale diagnostics while delivering agile leadership as a contractor supporting HPE, providing daily thought leadership to multiple engineering teams.
- On a team of 10, support 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.
- Deliver thought leadership to key stakeholders to support the design and architecture for scalable network topologies.
- Designed and implemented a new architecture that enabled the sharing of resources between two super computers. As a result, enabled the legacy super computer to access integral resources despite critical global chip shortage.

- In Collaboration with the Network Architect, designed interior gateway protocols and developed description standards.
- Support multiple programming tools utilizing Python to generate configuration based on provided inputs, generated significant team time savings while troubleshooting management network triage services for layers 2 through 7.

*Spectrum Enterprise, **Network Developer II***

Aug 2019 - Jun 2020

- Responsible for ensuring efficient and reliable network orchestration, virtualization, and automation platforms, leading integration efforts to improve production and providing daily leadership to support engineering teams and customers.
- Developed CI/CD build pipeline and automation for developed applications, managed completed complex technical projects while delivering network engineering and software development within cost efficient and Agile frameworks.

*Spectrum Enterprise, **Network Engineer II***

Jul 2017 - Aug 2019

- Reporting to the Network Engineering Manager, responsible for planning, designing and deploying network infrastructure, leading configuration, and troubleshooting of complex network technologies. Key Highlights:
- 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, **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.

*Madison Area Technical College, **Teaching Assistant***

Sep 2014 - May 2015

- Responsible for delivering supplemental instruction on advanced course materials to 10 students each week, including network equipment configuration, NetDevOps, Python automation, and CCNA exam preparation.
- Delivered engineering guidance, mentorship and instruction; encouraged growth, success and confidence in a diverse student base, built publicly available tools such as the hosted musical instrument simulator (mbira.duckdns.org)
- Participated in the North American Cisco NetRiders competition placing 18th out of several hundred participants. Delivered a professional presentation on how to scale up to network topology to meet increasing bandwidth demands.

*Gilware Data Recovery, **Data Recovery Intern***

May 2014 - Aug 2014

- Responsible for performing operational tasks and performance optimization to ensure the functionality of recovery systems critical to success of Gilware, utilizing hardware systems while providing support to cross-functional teams.
- In partnership with the marketing and sales teams, formed impactful relationships with new and existing client base, delivered a process improvement initiative to ensure data accuracy for critical forms and documentation processes.
- Led intake for damaged hard drives, assessed platters for damage including scoring or dust; archived replacement parts, ensured impeccable filing and documentation systems that resulted in reduced shipping costs and time.

EDUCATION

Madison Area Technical College

IT, Network Specialist • 2014 - 2015

LICENSES & CERTIFICATIONS

CCNP Routing and Switching

JNCIP-SP

JNCIA-Junos

SKILLS

NetDevOps • Python • REST APIs • JSON/XML/YAML • Linux • Git • Netconf • MP-BGP • MPLS • QoS