
ALEXANDER MCMILLEN

INTERNET ENGINEER | OPERATIONS EXPERT | ENTREPRENEUR

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ABOUT

Alexander is a seasoned engineering and operations executive with deep security expertise, who leads operations for OPAQ, now a Fortinet company. With his unique blend of technical know-how and operational experience, Alex designed and implemented solutions for mission-critical data center operators, web hosting companies, and cybersecurity firms. His background is immersed in systems and network engineering, as well as critical facilities construction and operations. Prior to joining OPAQ/Fortinet, Alex was responsible for global datacenter architecture and operations for security consulting firm Roka Security. Alexander's professional achievements include leading the day-to-day construction and operations of a 123,000 square-foot data center campus in Ashburn, Virginia's notable "Data Center Alley." He also built four Autonomous Systems (ISPs) from the ground up. In 2009, Alexander founded the Washington, DC chapter of the Vyatta Secret Society, a user group that enables companies to perform Software Defined Networking functions on commodity hardware. Alexander has contributed to open letters sent to Congress by the Electronic Frontier Foundation and Stanford Cyber Law Center regarding Net Neutrality and Cyber Threat Information Sharing programs. Alexander is a member of the North American Network Operators Group (NANOG), American Registry for Internet Numbers (ARIN), Electronic Frontier Foundation (EFF), Infrastructure Masons, 451 Global Digital Infrastructure Alliance, and Phi Beta Cyber Society.

CURRENT EXPERIENCE

SVP, OPERATIONS, OPAQ NETWORKS (ACQUIRED) – 2017-2020
DIRECTOR, NETWORK OPERATIONS, FORTINET - 2020-PRESENT

Joined as a VC/PE Venture-backed Startup coming out of Stealth, immediately following its first acquisition of Bat Blue Networks. Over 3 years, we raised \$45M and acquired 2 additional companies, Drawbridge Networks and FourV Systems. Exited to Fortinet.

- OPAQ was the premier network security cloud company. Our platform enabled partners to deliver Fortune 100-grade network security-as-a-service to mid-sized enterprises on a software-defined network, optimized for speed and performance. With OPAQ, service providers could centrally monitor security performance and compliance maturity, generate reports, manage security infrastructure, and enforce policies - all through a single interface. Based in Northern Virginia, OPAQ was privately held and funded by Columbia Capital, Greenspring Associates, Harmony Partners, and Zero-G, Inc.

- From an early stage, lead teams and defined strategy for Network and Security Operations (a combined "SNOC"), Infrastructure Site Reliability Engineering (SRE), Sales Operations, and Corporate IT for approximately 100 employees and contractors. The teams under my direction were disparately located, so we established effective communication strategy using Slack for "ChatOps".
- Developed consolidation strategy and execution plan to refactor existing footprint of data centers to improve startup runway after the acquisition of Bat Blue Networks (AS25885), and build next-generation architecture for delivering Secure Access Service Edge (SASE) worldwide. Presented strategy and it was approved by Board of Directors. Hired resources for execution of the strategy.
- Successfully consolidated existing datacenter footprint, removing 4 legacy datacenters (Dallas, New Jersey, New York, and London) and performed a complete rebuild of 4 datacenters with minimal service disruption, maintaining 99.99%+ service availability and 100% customer satisfaction scores.
- Developed patented security model for maintaining external customer portal for network and security configuration externally, and having components reach out to pull down and apply configuration to devices within a secure network management plane.
- Developed policies and implemented production Change Control methodology following ITIL standards across the organization. After QA was completed, our Security & Network Operations team served as the gatekeepers and implementors for all changes going into production in a reliable fashion.
- Developed platform Service Level Objectives (SLO) and Service Level Agreements (SLAs). Ensured compliance to our SLOs and SLAs across the entire platform, encompassing numerous components including Network and Systems Infrastructure, custom in-house software and platforms, including our customer portal, log management system, reporting & analytics, endpoint agents (iOS, Android, Windows, Mac, Linux), web application firewall.
- Participated as a member of our Product Security team, working with our Chief Information Security Officer (CISO) and Chief Technology Officer (CTO) to define and implement security strategy and policy for the organization. Achieved SOC 2 compliance for our platform operations.
- Maintained ongoing relationship with both Direct and Channel sales organizations, Solutions Architects, and Sales Operations. Participated in sales strategy meetings, development of service offerings, pricing strategies, and played an active role in the overall sales process.
- Successfully converted existing MSSP customer base from Bat Blue Networks with manual firewall configuration into an automated network and security posture.
- Performed due diligence for acquisition of FourV Systems, a data analytics company.

- After acquisition by Fortinet, developed strategy for migration of 24 existing customer networks running on Palo Alto Networks firewalls over to FortiGate with minimal disruption.
- Maintained 99.99%+ service availability, with 99.999% core network availability, including maintenance windows over a 36 month period.
- Implemented operational and support ticketing platform using Zendesk, monitoring utilizing Zabbix, Panopta, and Constellix Sonar. On-call paging with PagerDuty. Public-facing status website using StatusPage.
- Streamlined operational workflows for rapid incident response, with average MTTA of less than 60 seconds, and MTTR of less than 1 hour.
- Maintained 100% customer satisfaction metric over a 36 month period.

DIRECTOR OF NETWORK ARCHITECTURE, ROKA SECURITY – 2012-2017

Joined Roka Security as Employee #3.

- Transitioned existing systems and network infrastructure into a scalable architecture that was replicated across multiple locations in North America and Europe.
- Designed, built, and maintained a Service Provider backbone with datacenter deployments across North America and Europe under two autonomous systems (AS54876, AS62234) while maintaining 99.999% availability.
- Mitigated Distributed Denial of Service (DDoS) attacks against multiple high-profile targets, with attacks exceeding 100 Gbps.
- Performed vendor selection, maintained relationships, and handled procurement activities (Construction, Cabling, Network Devices, Datacenters, ISPs, etc.) for all internal business units.
- Generated a lesson plan and taught a course on Datacenter Fundamentals (encompassing Power, Cooling, and Network concepts) as part of a larger certification program.
- Performed incident response, vulnerability assessment, and scanning activities for customers across multiple verticals including Financial, Non-Profit, Government Contractors, Managed Services Providers (MSPs), Datacenter operators, and other Security companies.
- Assisted in Sales Engineering and Proposal Writing functions as needed, for both Commercial and Government contracts.

Participated in the creation or enhancement of the following products and services:

Managed Network Services, Digital Forensics and Incident Response, Roka Top 10 Vulnerability Assessment, *RokaScan* Vulnerability Scanning, Roka IDS (Intrusion Detection System), *RokaCom* (End-to-End Suite B encrypted voice, video, and chat application for iOS and Android), Managed Hosting

and Secure Enclave, Managed IP Transit/Transport/DDoS Mitigation, Datacenter Colocation, Virtual Security Appliances.

NETWORK OPERATIONS SUPERVISOR & SYSTEMS ENGINEER, LATISYS – 2010-2012
Acquired Pryme Technologies, now Zayo Group (\$ZAYO)

Managed on-site datacenter construction and operations activities of a 123,000 square foot datacenter campus in the Ashburn, VA market. Managed on-site vendors for mechanical, electrical, construction, raised flooring, cabling, etc. Handled change management for the Ashburn market and maintained 100% uptime, including successful removal of temporary generators and tie-in of five 2MW Caterpillar Generators while supporting critical load, installation of 30 Ton CRAC units with rooftop condensers.

Doubled capacity of an operational datacenter without any incurred downtime or customer-facing issues. Worked with remote implementations and engineering teams to deploy customer solutions including over 400 cabinets. Provided co-location customer service and power/cooling/network related support in an on-call environment 24x7x365.

Worked with remote network engineering group to re-configure the entire Ashburn network including installation of multiple border, core, and distribution routers and DWDM across two datacenters.

Managed large-scale implementation of over 4000+ systems across four markets, with eight datacenter. Supported Linux, Windows, and VMWare Systems. Developed standardized cabling, labeling, power, and rack design to be implemented across all datacenter, enabling remote engineers to support all markets consistently. Assisted with the roll-out of systems and network engineering projects in the Ashburn market, including Cisco Nexus 7000/5000/2000 series and Cisco Catalyst 6500/7500 series devices.

Part of strategic team which developed and implemented Latisys' Cloud through a strategic partnership with HP. This cloud platform became the basis of sale of Latisys to Zayo Group (\$675M) and is now "Zayo Cloud" in 2015.

SR NETWORK OPERATIONS ENGINEER, PRYME TECHNOLOGIES / PULLTHEPLUG –
2006-2008, 2009-2010

Joined as Employee #2, without VC/PE backing, constructed a 123,000 square foot, 41 Megawatt Datacenter Campus in Ashburn's famed "Data Center Alley" during the 2009 recession. Successful exit to Latisys.

Responsible for Network Operations of AS29944, with over 70 Gbps of capacity at its peak. Was the only on-site engineer handling facility and network issues during business hours. Provided hands-on training and support to all overnight/weekend personnel in order to reduce on-call escalations.

Provided on-call support on power/cooling/engineering related issues 24x7x365. Handled remote hands issues at the Pryme Technologies facility, Switch & Data Reston, and Equinix Ashburn (DC2/DC3). Acted as a liaison and administrator for irc.ptptech.com on the Eris Free IRC Network (EFNet). Mitigated associated DDoS attacks.

NETWORK ENGINEER, APPLIED SECURITY – 2007-2008

Managed four internal server rooms including critical power/cooling, worked with associated vendors. Managed internal routers, firewalls, switches, and servers. Provided technical assistance to a security-minded group in a mixed network environment.

SYSTEMS ENGINEER, INTERNATIONAL TECHNOLOGY INSTITUTE (ITI) – 2002-2006

Assisted with the development of the E-Platform for GATE. This platform would provide the digital and local resources necessary to expand trade between developing countries around the world, in keeping with the United Nations' Millennium Development Goals. Presented the platform along with a proof-of-concept that I developed at the United Nations Development Programme (UNDP) 2006 GATE Summit and Expo in Shanghai.

CO-FOUNDER, SLIQUA ENTERPRISE HOSTING – 2002-CURRENT

Co-founded Sliqua and began hosting customers during my freshman year of high school in 2002, incorporated the business after graduation in 2006. Responsible for the design, implementation, and operations of an IPv4/IPv6-enabled autonomous system (AS32740). Lead development efforts on a custom LAMP platform (Sliqua Server Environment). Handled security and maintenance of critical systems for customers that demand 100% uptime. Provided on-call technical assistance 24x7x365. Manage diverse teams of support and engineering professionals. Maintained partnerships with industry leaders including Cloudflare, InterWorx, Ksplice, Blank Law and Technology, and Vyatta

MEMBERSHIPS

BOARD MEMBER, UNIVERSITY OF RICHMOND CUSTOMER EXPERIENCE (CX) PROGRAM
NORTH AMERICAN NETWORK OPERATORS GROUP (NANOG)
LEAGUE OF PROFESSIONAL SYSTEMS ADMINISTRATORS (LOPSA)
RIPE NETWORK COORDINATION CENTRE (EU)
AMERICAN REGISTRY FOR INTERNET NUMBERS (US)
ELECTRONIC FRONTIER FOUNDATION (EFF)
451 GLOBAL DIGITAL INFRASTRUCTURE ALLIANCE
VYOS OPEN SOURCE PROJECT CONTRIBUTOR
HACKERS ON PLANET EARTH NOC
INFRASTRUCTURE MASONS
PHI BETA CYBER SOCIETY

RECOMMENDATIONS

"Alex is one of those guys who makes everyone working around him better. He's a Swiss army knife that you can use in just about any situation in the information security, networking, or engineering realms—among other things. His peerless experience and gregarious nature make him a natural fit for many environments."

- John Thomas, CISSP, Lead Instructor at Roka Security

"Alex is one of the smartest and nicest guys I've had the pleasure to work with. He is always open to discuss the merits of a solution or the details of a problem. He can discuss architectural and implementation details with the best engineers and the least technical client, with equal enthusiasm.

He's extremely well versed in OSPF, BGP, MPLS, data center implementation, routing, switching and a large variety of security products. His notable technical skills combined with his commitment to client satisfaction makes him an asset to any organization. He is wildly intelligent, hard working, a problem solver, and a team player."

-Joni Jordan, Platform Operations at Akamai Technologies

"Alex is hands down one of the best IT resources I have worked with in the field. He possesses a high degree of knowledge and expertise in all things security related. In addition, I found his knowledge and skill in deploying and understanding cloud solutions on par with his security skills. He makes it easy and enjoyable to work with him and get the job done. In today's fast changing security and cloud environment, Alex is uniquely qualified to match the 2 areas together and configure a winning result. I'm sure you will find Alex as great to work with as I have!"

-Mark Creekmore, Senior Technical Consultant at Hewlett Packard Enterprise

"Alex has one of the best personalities you could ask for in anyone you're working with in any industry. The fact that he has this in the IT field makes him such a strong asset to the work environment, including customer retention. Alex is thoroughly knowledgeable about a vast range of technologies, ones he uses himself directly or ones he follows intently just to fill his need to gather more and more knowledge. If there is one person you need on your team that not only knows their technology, but someone who is a go-getter and a joy to be around, Alex is your man, without any doubt what-so-ever."

-Geoffrey M. Bricker, VP Information Technology at SURE