

Trevor Patch

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TOP SECRET DHS (2022) | TOP SECRET DOJ/EOIR (ESTIMATED 2022) | SECRET DOJ/DEA (2021)

Obsessed Automation and DevOps Evangelist with building needle moving solutions that eliminate toil and embrace a digital future with cloud (public, private, or both). Traditionally trained Network Architect and Engineer with 10+ years of experience providing unforgettable experiences to clients with migrating and automating branch offices, datacenters, firewalls, load balancers, and clouds. Plagued with the overwhelming urge to champion everyone around me to tinker, figure things out, and build solutions with cutting edge technologies.

Professional Experience

PRESIDIO FEDERAL

August 2021 - Present

Principal Architect – Cloud and DevOps (Details Classified)

- Collaborate with the sales team, formulate, and execute a sales strategy to exceed revenue objectives through the adoption of Cloud, Cloud-Native Strategies, IaC GitOps and DevOps CI/CD pipelines.
- Ensure success in building and migrating applications, software, and services on Cloud platforms.
- Mentor and champion customers of all sizes on the value proposition of Cloud/DevOps and participate in deep architectural discussions to ensure solutions are designed for successful deployment in the cloud.
- Conduct one-to-few and one-to-many training sessions with a DevOps mindset to transfer knowledge to customers considering or already operating in Cloud.
- Capture and share best-practice knowledge amongst the solutions architect community around Cloud, and digital transformations.
- Build deep relationships with senior technical individuals and key stakeholders within customer organizations to enable them to be advocates Cloud and DevOps.
- Act as a technical liaison between customers, service engineering teams, and support.

Network Architect – Datacenter, Cloud, and Automation (Details Classified)

- Understand Customer Current State. Proactivity drive discovery and understanding of customer IT current state, goals, outcomes, and initiatives across Business, Technical, Operational, and Financial facets. Research industry trends and topics and develop discovery approaches. Develop and lead workshops to drive relevant discovery. Document customer current state to assist customer and sales teams target future state architectures and roadmaps.
- Technical Opportunity Leadership. Identify customer stakeholders and their individual success criteria and needs. Create and lead technical solution approaches and next steps aligned to customer stakeholders. Align, vet and coordinate Presidio and vendor partner technical resources as needed. Engage Manager/VP/Director level at clients directly.
- Solution Architecture, Design and Documentation. Analyze and assess client requirements and determine target architecture and design solutions (HW, SW, Licensing, Cloud services, Managed Services, Delivery Services, etc.) and roadmaps. Create and deliver compelling technical proposals directly to clients, including relevant drawings, diagrams, and analysis.
- Technical Excellence & Evangelism. Maintain a high level of technical excellence and evangelism across multiple relevant solution architecture and product areas. Lead the curation and delivery of relevant technical knowledge, presentations, and conversations at all client levels and customer related events. Actively participate in technical champion programs and communities. Attain certifications when appropriate. Learn, discuss, and present new and emerging technical and IT related topics.
- Account Leadership. Actively participate in client account related activities that establish the Solution Architect as a trusted advisor internally and with customers, such as: Account planning, EBCs, social events, etc.

- Team Engagement and Enable Culture. Engage Presidio team members, actively participate in team activities, and contribute on collaboration tools to drive an open, positive, inclusive, resilient, change-orientated team culture.

IBM GTS / KYNDRYL

August 2020 - August 2021

IT Manager – Network and Security Support Specialist

- Designed, developed, and implemented zero touch automation for 27.5M USD labor cost savings per quarter leveraging a complex home-grown ecosystem.
- Developed and implemented custom frontend self-service portals leveraging JavaScript, node.js, react, and flask on RHEL servers.
- Developed and implemented custom middleware / microservices for integration interactions between frontend portals, tools, job engines, and backend to enable various automations.
- Developed and implemented 100+ PERL, Python, Infoblox CCS, YAML, etc. scripts on various job engines (Infoblox NetMRI, Ansible, etc.) to automate through APIs and CLI provisioning, code upgrades, proactive troubleshooting/scanning, and other workflow related items.
- Designed, developed, and implemented standard operating procedures for data center infrastructure provisioning for network services.
- Designed, developed, and implemented standard operating procedures for network security services for firewall and web content filtering.
- Lead, designed, and migrated two large brownfield data centers from a traditional 3-layer Cisco Nexus 9k/7k/6k/5k/4k/3k/2k environment a segmented multi-pod Cisco ACI spine leaf-network with an optimized hardware proxy control plane.
- Lead, designed, and migrated a large brownfield data center from a traditional 3-layer Cisco Nexus 9k/7k/6k/5k/4k/3k/2k environment to a segmented hybrid multi-cloud, and a Cisco Nexus DCNM eVPN Leaf-Spine environment.
- Lead the migrations of 1000+ B2B IPSEC tunnels and rules from Checkpoint to Palo Alto for Anthem and managed subsidiaries.
- Lead the migrations of 200+ firewalls from Checkpoint to Palo Alto for Anthem and managed subsidiaries.
- Lead the migration of web content filtering functions from Bluecoat and Websense to Palo Alto for Anthem and managed subsidiaries.
- Established and managed Trello Kanban Agile frameworks for continuous improvement of various automation workflows, projects, and home-grown products.

ANTHEM, INC.

March 2018 - August 2020

IT Manager II – Data Center Network Infrastructure

- Mentored & championed several direct reports to be recognized across the Anthem organization in consecutive monthly Enterprise Technology Services Edge Awards in Q1/Q2 of 2020.
- Established collaborative environments for multiple internal teams and external vendors such as Cisco Systems & iVision over WebEx and Microsoft teams.
- Lead operation improvements by leveraging WebEx teams' bots to open virtual Cisco TAC spaces for increased collaboration with multiple teams in both proactive cases for release weekends & incident response leading to significant reductions in both incident count & mean time to repair (MTTR).
- Lead the development of frontend self-service applications for IP provisioning, network segmentation queries, data center network capacity planning, and switchport provisioning for both Cisco Standalone Nexus and ACI leading to a streamlined pipelines & SLAs within workflows for increased speed to market & overall data center stability capabilities for Anthem.
- Lead the migration of a single Infoblox NetMRI Automation Engine to Infoblox NetMRI Operations Deployment consisting of HA pairs of 4k & 2k appliances to touch/make changes data center devices 1+ million times per quarter.
- Lead the development of 50+ Python, PERL, and CCS DevNetOps scripts leveraging a NetMRI automation engine for lights on activities, custom issue scanning (such a memory leaks), ad-hoc

infrastructure release scopes, and other audit/standards compliance scans for both corporate data center locations & Equinix colocations.

- Developed the migration plan and lead the implementation for forklift migrations for 500+ nodes of Cisco Standalone Nexus & Fabric Extenders into multiple IPN/ISN/MSO Cisco ACI Fabrics for two massive scale data centers with minimal downtime.
- Developed & optimized the work intake process, standard operating procedures, and infrastructure reference documentation for all data center network activities for multiple brownfield data centers.

Cisco Network Team Lead – Data Center Network Infrastructure

- Enterprise Technology Services Edge Award Winner 2019.
- Migrated 30+ pairs of Nexus5020, Catalyst 4507R+Es, Catalyst 4948s and Catalysts 6509s to Nexus 5696Q with 2200/2300 FEX and 93180YC-EX with 2200/2300 FEX in a double-sided VPC for a brownfield Data Center.
- Implemented NXOS upgrades for 250+ pairs of Nexus 5596UP, Nexus 5672UP, and Nexus 5696Q from 5.X & 6.X to a standard code level of 7.3.1(N1)1 including a SPROM upgrade from 1.0 to 1.1 for multiple Massive Scale Data Centers.
- Discovered Cisco Bug CSCvp08583 during the implementation of NXOS upgrades for 100+ pairs of Nexus 93108TC, Nexus 93180YC, and Nexus 93180LC from multiple code versions to a standard code version of 7.0(3)I7(4) for multiple massive scale data centers.
- Implemented NXOS upgrades for 12+ pairs of Nexus 7000/7700 from multiple code versions to a standard code version of 8.2(3) to support installation of M3 100gig line cards for multiple brownfield data centers.
- Lead the development and deployment of a network automation for the agile provisioning of standalone nexus ports through leveraging Infoblox NetMRI & a custom web-based frontend for multiple massive scale data centers.
- Implemented & troubleshot ISN/IPN Cisco ACI Fabrics with multiple ACI & NCI tenants consisting of 400+ nodes of 9508s/9504s/9364C/9336C-FX2/93180YC-FX/93108TC-FX ACI Leaf/Spine switches for multi-site massive scale data centers.
- Implemented NXOS upgrades of 3+ pairs of Nexus3172PQ10GE from various code versions to a standard code version of 7.0(3)I7(6) for multiple brownfield data centers.
- Developed and implemented a refresh strategy for out of band management and console leveraging OpenGear and eVPC Nexus 2200 series fabric extenders for multiple brownfield massive scale data centers.
- Member of a level 2, 24x7x365, on-call rotation, and sole primary/catch-all escalation point for level 3.

PENACITY

August 2017 - August 2018

Independent Network Consultant – Palo Alto Firewalls

- Deployed Route-Based Site-To-Site IPsec VPN tunnels between Microsoft Azure Virtual Network Gateways and Palo Alto Networks Next Generation Firewall running 7.X code for an Enterprise Network.
- Upgraded a pair of Active/Passive PA-500s running PAN-OS 7.0.18 to PAN-OS 7.1.4 to resolve stability issues noted in Bug ID# 96415 with IPsec Site-To-Site VPN Tunnels between an On-Prem Network and Microsoft Azure.
- Deployed a Sophos XG d2-VM firewalls within Microsoft Azure Cloud environment for an enterprise migration project.
- Configured site-to-site IPsec VPN tunnels to interconnect a Microsoft Azure Cloud environment leveraging a Sophos XG d2-VM firewalls and on-prem LANs leveraging Cisco Meraki MX100 security appliances for an enterprise migration project.

ASTON TECHNOLOGIES

August 2017 - March 2018

Data Escalation – In-House TAC and Team Lead

- Performed a detailed discovery and in-depth best practices audit of Cisco ASA's in an Enterprise network.
- Developed a strategic plan for the end of the life cycle for Cisco ASA's in an Enterprise environment.

- Developed firewall administration and VPN management documentation for Enterprise clientele.
- Designed an Enterprise Deployment of Palo Alto 3020's utilizing virtual routers in an active/standby deployment.
- Lead the migration from four pairs of Cisco ASA 5545's to a singular pair of Palo Alto 3020's utilizing migration tools.
- Designed, coordinated, and implemented the successful cutover of 30+ IPsec VPN from Cisco ASA to Palo Alto for an Enterprise client involving International & Global companies.
- Troubleshoot routing, switching, and firewalls for a complex Enterprise Network including the trapping and reporting of critical information via SNMP to a Spectrum deployment.
- Designed and developed a PoC for Palo Alto Global Protect as a RA-VPN solution for a Global Enterprise Client utilizing two-factor authentication.
- Designed, coordinated, and migrated 50+ acquired Branch Offices utilizing VRFs, IPsec, MPLS, DM-VPN, BGP, and EIGRP on Cisco Catalyst, Nexus, ISRs, and ASAs for an Enterprise Customer.
- Performed the decommissioning of 10 pairs of Cisco Nexus 7010s, 60 pairs of Cisco Nexus 5548s, and 400+ ToR Cisco Nexus FEXs leveraging VPC & eVPC in a brownfield Data Center.
- Designed and implemented a greenfield production & disaster relief Data Centers consisting of pairs of Cisco Nexus 7010s, 5548UPs, and 92304QCs in a Classic Ethernet VPC and OTV unicast-mode deployment for an Enterprise Customer.
- Developed IP Scheme and allocating subnets for SOHO and Enterprise Clients.
- Deployed a distributed ISE 1.x deployment in Enterprise Campus environment.
- Designed and deployed over 50 Cisco ASA 5500-Xs w/ CWS & CDA in a security posturing project for an Enterprise Client.
- Audited over 25 M&A sites for compliance to industry best practices related to MST, EIGRP, BGP, PBR, DMVPN and other layer 2-3 technologies for an Enterprise Client.
- Migrated NX7K M1/F1 to F2e line cards within minimal downtime for a brownfield datacenter.
- Migrated four pairs of Cisco ASA firewalls to a single pair of Palo Alto Networks 3000 series Next-generation Firewalls in a brownfield datacenter.
- Migrated over 50 site-to-site IPsec VPNs from the Cisco ASA to the Palo Alto Network's 3000 series NGFW.
- Migrated RA-VPN enterprise clients from Cisco Anyconnect to Palo Alto Network's GlobalProtect.
- Developed study curriculum to over 100+ Junior and Mid-Level Network Engineers in developing QoS strategies and deployments for Enterprise customers utilizing Cisco NBARv2 for packet flow identification.

Senior Network Engineer – Staff Augmentation and Professional Services

- Deployment design for Enterprise Composite Model using EIGRP and BGP for an Enterprise customer.
- Deployment design for a DiffServ QoS Deployment with emphasis on Interactive Voice and Video (Cisco Jabber).
- Deployment design for concept network laboratory environments.
- Integrated external identity stores and identity store sequences into Cisco ACS 5.X.
- Lead design efforts in redesigning a new warm disaster recovery facility.
- Mentored twelve engineers in R&S, datacenter, and security pertains.
- Migrated Cisco ACS 4.2 to Cisco ACS 5.X supporting over 3,000 RADIUS users.
- Migrated from Cisco Catalyst 6513s to Nexus 9504s
- Performed a system discovery with Palo Alto to improve site documentation.
- Performed 10+ site-to-site VPN changes, subnet changes, and peer address changes on Cisco ASAs.
- Provided support for escalated issues pertaining ACLs, DM-VPN, RA-VPN (Cisco AnyConnect), Site-to-Site VPNs, EIGRP, BGP, LACP, CAPWAP, HSRP, Voice VLANs, EtherChannels, VPC, NHRP, VRF, VDC, etc.
- Utilized Palo Alto 5020s to implement 1000+ security rules and 250+ NAT policies.
- Updated/Modified OSPF and EIGRP configurations on Nexus 9504s.
- Standardized AAA across 3000+ IOS devices.
- Assisted in daily pertains of troubleshooting issues for end users at 300+ remote sites.

- Configured URL filtering for 50+ sites with PAN-S 5.0.10 – 7.0.2.
- Created/Updates/Modified VLANs and interVLAN routing.
- Designed, configured, and deployed the PAN GlobalProtect RA-VPN solution to migrate away from Cisco PIX's RA-VPN solution using certificates.
- Designed a migration from ASA to PAN using ARIN addresses including firewall rules and site-to-site VPNs.
- Deployment design for consolidation and migrating five small public address blocks to a single large ARIN block.

Network Engineer – Staff Augmentation and Professional Services

- Configured Cisco 4500 and 6500 series Switch in VSS mode to create Loop Free 3-Tier topologies.
- Configured multi-vendor BGP in interact with both private MPLS and carrier grade internet access points and regional Data Centers.
- Created from scratch, Core, Distribution and Access layer device configuration templates in efforts to standardize Infrastructure topologies.
- Developed standards and best practices for emerging business units and Merger and Acquisitions.
- Deployed Dual NHRP topologies to supply corporate remote working solutions with redundancy and high availability.
- Employed Hierarchical OSPF designs to accommodate Projected Growth in numbers of business locations.
- Implemented instances of EIGRP to be a dynamic routing protocol in point to multipoint DMVPN backup solutions.
- Lead design efforts in creating new Disaster Recovery Facility.
- Member of a monthly on call rotation for 24 hr emergency.
- Migrated and Consolidated 20 pairs of ACE 4710s to 8 pairs of BIG-IP 7050s running in active standby configuration.
- Migrated 68 pairs of Cisco 6509s to Nexus 7010s and 7018s in undertaking to refresh several global data centers.
- Performed Firewall Migrations from 6 pairs of Cisco ASA to 6 pairs of Palo Alto Firewalls.
- Performed Extensive testing and validation on Migration Strategies utilized in Merger and Acquisitions.
- Performed hardware refresh of over 1500 access switches spanning multiple countries and facilities going from Catalyst 3750 to X series equivalent.
- Ran engineering calls to discuss implementation strategies and address design considerations.
- Sat in meetings with non-technical business representatives to explain and defend, from a technical perspective, various justifications for technical decisions made.
- Supported over 100 in house developed applications traversing over 10 pairs of F5 LTM Load balancers.
- Deployed Hardware refresh of over 8000 Access and Distribution Devices globally.
- Deployed and Polled 2000 varying types of Cisco switches.
- Performed Initial Designs for DMZ Expansion in geographically separated co-located Data Centers.
- Performed Firewall Hardware refresh and Firewall Rule Consolidation on over 10,000 rules spread across 5 pairs of Cisco ASAs.
- Sat in on meetings regarding change controls and configuration reviews.
- Created documentation for Senior Executives to understand what all is happening with changes forth coming and existing environments.
- Directly responsible for maintaining B2B VPN infrastructure both existing and adding new VPNs.
- Configured EIGRP for large scale environments including multibuilding campus infrastructures.

Projects

THE DAILY PATCH - BLOG

September 2022

- A daily blog to cover my thoughts on relevant events and/or technologies.

Certifications

Aviatrix	ACE Multi-Cloud Network Associate ACE Multi-Cloud Network Operation ACE Multi-Cloud Network IaC ACE Multi-Cloud Network Professional
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AWS	Cloud Practitioner
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CompTIA	IT Fundamentals A+ Network+ Mobility+ IT Operations Specialist (CIOS)
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Meraki	Certified Meraki Networking Associate
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Education

GEORGE MASON UNIVERSITY <i>Bachelor's Degree, Information Systems & Operations Management</i>	2009-2014
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