

Andy Kumeda

Infrastructure Automation Engineer | Network Automation | AI-Assisted Operations

Cisco CCIE #3406 (Routing & Switching), Lifetime Emeritus

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Professional Summary

- Principal-level infrastructure automation engineer and CCIE with 25+ years of enterprise experience spanning network architecture, critical operations, security, and technical leadership.
- Builds repeatable infrastructure delivery with Python, Ansible, APIs, structured data, validation, and production runbooks.
- Applies AI-assisted engineering to shipped tools, code, testing, and documentation without treating AI as a substitute for operational judgment.

Technical Skills

- Network Automation: Cisco ZTP, OpenGear console automation, Ansible, Netmiko, pyATS, configuration management, inventory, validation, and repeatable provisioning.
- Infrastructure Automation and IaC: Python, Flask, SQLite, Docker, Git, REST APIs, Terraform, ServiceNow integration, structured data models, deployment workflows, and production runbooks.
- Cisco and Network Architecture: Catalyst 9000, Nexus 9000, Catalyst Center, ISE, SD-Access, IOS-XE, NX-OS, OSPF, BGP, EIGRP, IS-IS, VLANs, VXLAN EVPN, QoS, MPLS, and VPN.
- AI-Assisted Engineering: Shipped AI-assisted tools, workflow orchestration, guarded code and documentation workflows, automated testing, and privacy-conscious diagnostics.
- Security and Operations: Fortinet, Cisco ASA, IDS/IPS, NAC, segmentation, CJIS, FIPS, SOX, PCI, infrastructure monitoring, incident response, and high-availability operations.

Professional Experience

World Wide Technology (WWT) - Senior Network Engineer

Client: Ventura County Healthcare Agency | August 2023 - June 2026

- Built and deployed a Dockerized zero-touch provisioning (ZTP) registry on OpenGear that integrated Flask, SQLite, Cisco IOS-XE/NX-OS ZTP scripts, Ansible execution, live dashboarding, and ServiceNow REST synchronization, eliminating roughly 33 hours of manual work per 100-device staging wave.
- Assessed campus and data center Cisco environments and produced modernization designs, standards, documentation, and migration plans for legacy-platform replacement with Catalyst 9000 switching.
- Configured and validated a Catalyst 9000 pilot to test migration assumptions, switching standards, routing behavior, VLAN segmentation, and operational readiness before production rollout.
- Designed a Cisco SD-Access architecture using ISE for identity and policy, with Cisco Catalyst Center incorporated into the target design and migration roadmap.
- Designed, configured, and validated a Nexus 9000 NX-OS VXLAN EVPN spine/leaf pilot for greenfield server infrastructure intended to replace a legacy collapsed-core model.
- Applied Python, Ansible, Git, structured validation, and AI-assisted engineering to improve configuration delivery, documentation, troubleshooting, and cross-functional operational handoff.

Delta9 Technology, LLC - Principal Consultant

2017 - 2023

- Designed security and infrastructure solutions for law enforcement, healthcare, startup, university, research, and multimedia environments.
- Architected CJIS- and FIPS-aligned security solutions using IDS/IPS, firewall, and VPN platforms.

DexYP - Network Architect

2015 - 2017

- Designed enterprise WAN, LAN, WLAN, security, data analytics, NFV, SDN, and virtualization architecture aligned with business objectives.
- Built Ansible and Python automation for configuration management and repeatable network operations.
- Designed a custom open-source DCIM application integrating infrastructure and application data across multiple data centers.

YP (Yellowpages.com) - Executive Director, Network and Telecom

2012 - 2015

- Directed network and telephony infrastructure operations, performance metrics, SLAs, and resource allocation across multiple business units.

AT&T Interactive - Associate Director, Voice and Data

2009 - 2012

- Designed multi-vendor data and voice networks and built or expanded six Tier 4 high-density data centers within budget and timeline constraints.

Yellowpages.com | AT&T - Manager, Network Operations

2007 - 2009

- Led LAN, WAN, remote communications, and data center connectivity operations while maintaining 99.9% uptime through high-availability design and proactive monitoring.

CureSearch | National Childhood Cancer Foundation - Director, Information Technology

2004 - 2007

- Directed IT infrastructure strategy and long-range technology planning in support of organizational and scientific objectives.

Yahoo! | Overture Services | GoTo.com - Senior Network Engineer

2001 - 2004

- Designed and implemented networks and data centers across twelve countries supporting sales, customer service, and web-search production facilities.

Selected Technical Project

Network ZTP Registry

<https://github.com/andykumeda/network-ztp-registry>

- Built an end-to-end provisioning workflow spanning initial boot, staging, inventory, operational registration, validation, and handoff.

Credentials and Education

- Cisco CCIE #3406 (Routing & Switching), Lifetime Emeritus
- B.S., Computer Science and Engineering - California State University, Long Beach