

Expertise Summary:

Overall networking & security background includes LAN / WAN / server / data center infrastructure design, deployment & support; project leader; classroom trainer; 16 years experience with IT, nearly 7 years working for a consulting firm on enterprise-class infrastructures, 6 years of working on a variety of networking technologies; Security skills for securing & analyzing infrastructures; Wide array of certifications including CCIE, CCDP, CCSP, MCSE's, INFOSEC, CompTIA, etc.

Experience Chronology:**2/2003 to present** *NetPrivateer (formerly Sonon Consulting) - Freelancing, Reading, PA*

- 2003 to 2004 – Owner & Network / Security Architect – Freelanced then start-up consulting firm with accounts:
- Utility Company* Helped with maps, new WAN, VoIP, VPN's, Cisco PIX firewall, wireless, security assessments & issues, multitask dozens of projects, BGP4, disaster recovery, IBM BladeCenter, traffic analysis, capacity & strategic planning, etc. as a subcontractor
 - Government Agency* New network design, facility move, Cisco PIX, VPN, layer-3 LAN with Cisco 3750 & 2950's, Cisco Aironet secured wireless, vendor network isolation, redundant power solution, various security advisory, another subcontractor job
 - Two Colleges* At a larger college, added 3 additional Nortel Passport 8600 L3 cores to the multi-gigabit backbone for traffic separation of the student population. At smaller college helped similarly with a Cisco PIX cluster, security advisory, multiple DMZ's.
 - Mass Transit* LAN overhaul help with Cisco 2950 switches, network assessment, facility remodeling improvisations. Consulting on VPN, voice/data T1 issues, Novell to Microsoft migration, security concerns, capacity planning, IT strategies, etc.
 - Other Firms* Security-related work for two financial firms, assisted with LAN overhauls, wireless lockdown, VPN, secure hosting issues, anti-spam, several SMB Cisco PIX customers with VPN, 9-site HVAC company VPN rollout, some subcontracting

9/1996 to 3/2003 *Distributed Systems Services, West Lawn, PA*

- 1999 to 2003 – (Senior) Network Engineer – Designing & supporting networks for over 100 accounts including:
- Utility Company* Mapped out, secured and dramatically improved. Went from 900 nodes of token ring, Nortel ASN & Centillion to Cisco 6509 layer-3 switching over fiber optics. Converted 10 sites to switched ethernet, built fault-tolerant dual Internet and new WAN pilot site. Extensive troubleshooting for a complex mix of OS & protocols.
 - Local College* New \$330,000 Cisco ethernet campus network in 2002 using Cisco 6509 & 4006, fiber optics in a dozen buildings, extensive security controls, integrated 3 existing firewalls into mix with multiple routers, smooth one-week migration. Previously supported their legacy Bay / Nortel hub & router network and WiFi deployments.
 - Supermarket Chain* Multi-site WAN, extensive LAN infrastructure in 1998, CheckPoint firewall, LAN upgrades and WAN enhancements. Last projects were ISDN PRI dial-in & dial-out solution using a Cisco 3725 authenticating against RADIUS and a flooding disaster rescue. This customer was over two hours away, so VPN was built for support.
 - Oil Company* In early 2000, heating oil company went from legacy DEC VAX & green-screen terminals to TCP/IP, Internet access and Microsoft infrastructure. A 9-site frame relay WAN, remote LAN's, Windows NT, Citrix, Lotus Domino and CheckPoint firewall. Eventually in 2003, replaced CheckPoint with Cisco PIX, started VPN
 - Mail Sorting Firm* Started with almost nothing except a few PC's, became a 6-site frame relay with NT, Citrix, Exchange and databases around 1997. Later got wireless, Cisco IP Telephony with another vendor, Voice over IP (VoIP), Internet access, Cisco PIX firewall and a new LAN layer-3 switched on a Cisco 4507R redundant core
 - Large College* Largest project to date, \$2.5 million, 18 months, 100's of Nortel switches, 17 miles of fiber optics, 100 wiring closets, 55 buildings, 3 Nortel Passport 8600 layer-3 cores, 4700 campus ports, 12 gigabit redundant backbone. Migrated out IBM token gear, routed IP/IPX, map, trained people, illustrated 150 page docs.

- 1997 to 1999 Systems Engineer & Network Analyst – A mix of server and networking work including:
 Local Bank A year with Novell, MS-DOS, Windows for Workgroups 3.11, Windows 95, Windows NT, Citrix WinFrame, Windows 2000 Terminal Services. Some CheckPoint firewall, token ring hubs, double-NAT frame relay. Other consulting on LAN, WAN, IDS and PIX. Helped also securities and investment divisions.
- Small Clients* Given 8 accounts under 100 PC's in 1997 to support solo. Trained techs to support over 70 SMB's until 1999. Team leader of 6 people, 2nd & 3rd level on networks with extensive server and application support. Some phone dial-on-demand (DDR) WAN's, proxy Internet access, primary classroom trainer from 2000 to 2001.
- 1996 to 1997 PC Analyst & Lead Tech – PC, server & hardware support plus light duty networking including:
 Steel Plant Hardware and server / desktop analysis, supported population 2,600+ PC's, 100+ servers, 100+ buildings. First MCSE at firm, did NT domains, DHCP, DNS, WINS, network browsing, Novell & Microsoft scripts, improvised solutions, maintained a WAN link, helped with CheckPoint firewall, MS Proxy and IIS.

3/1988 to 9/1996 *Various technical careers working mostly with hardware – electronics & electromechanical*

Skill Inventory:

Design – Pre-sales design through budget, prototype, planning, scheduling, deployment, install support & diagnostics
 Support – Remote & on-site network admin, almost every MS OS since DOS 3.3 plus NetWare 4.11, RH Linux 6.x to 9.x
 Technical Docs – Drawing & writing skills with MS Visio, Office, Project and web sites plus Geek-to-English translation
 LAN's – L2 & L3 switches, hubs, cabling specs for 10Base2/5/T, 100BaseTX/FX, 1000BaseSX/LX/T, campus fiber optics
 WAN's – Routers, point-to-point, NBMA's, channeled T1, fractional T3, Internet, VoIP, QoS, traffic filtering & shaping
 Layer 2 – 802.x, token ring, ethernet, serial, wireless, bridging, PPP, HDLC, frame relay, ISDN, POTS/PSTN, xDSL/cable
 Layer 3 – TCP/IP, IPX/SPX, NetBEUI, RIP, OSPF, BGP, IGRP, EIGRP, NAT, IPSEC & GRE VPN's, ATM, RAS, ACL
 Application Protocols – HTTP, SSL, FTP, SMTP & POP3 email, Terminal Services, Citrix, DHCP, DNS, WINS, RADIUS
 Security – Stateful inspection firewalls, encryption, proxies, SSH, IDS, remote access, hardening & audits of infrastructures
 Hardware – Component level electronic repairs, server architecture, data center plans and enterprise rack-mount equipment
 Key Skills – Rapid learning, creative design thinking & ability to improvise solutions on the fly in complex environments

Education & Training Courses:

Large amounts of self-study with extensive home network lab including Cisco, Microsoft, VMware, Linux, etc.
 Cisco's Introduction to Cisco Router Configuration
 Cisco's Interconnecting Cisco Network Devices
 Nortel Networks Frame Switching
 Nortel Networks Passport 1000/8000 Configuration
 Nortel Networks Accelerated Router Configuration
 SecureIT CheckPoint Firewall-1 Administration
 SecureIT CheckPoint Firewall-1 Advanced
 SecureIT Beyond the Firewall – Applied Hacking
 Microsoft Certified Trainer / Train-the-Trainer
 Microsoft's Internet Information Server 4.0
 Microsoft's Updating Skills from Windows NT 4.0 to Windows 2000
 Microsoft Certified Systems Engineer Boot Camp for NT 3.51 Track
 Hewlett Packard's Advanced NetServer Training
 Ouellette & Associates' IS as a Service Organization
 IBM's Netfinity Manager (informal from IBM engineers)
 Compumaster's Telecommunications Fundamentals
 Compumaster's WAN / LAN Technologies
 SkillPath Seminar Coaching & Teambuilding for Managers & Supervisors
 SkillPath Seminar Managing Multiple Projects, Objectives and Deadlines
 Thomas & Betts informal class on TIA/EIA/IEEE compliant copper & fiber wiring for ethernet up to gigabit on CAT7
 Penn State WISE (Workplace Integration Skills for Engineers) - Leadership & teamwork training program
 Penn State Bachelor of Science in Electrical Engineering (BSEE) - Incomplete & one year remaining; may convert to BSIT
 Lehigh University & Reading Area Community College – Robotics, Artificial Intelligence & Computer Graphics

Certifications – Current:

Cisco Certified Internetworking Expert (CCIE) #11846 – Routing / Switching specialty
Cisco Certified Security Professional (CCSP)
Cisco Certified Design Professional (CCDP)
National Security Agency & CSSA Information Security (INFOSEC)
Microsoft Certified Systems Engineer (MCSE) in Windows 2000
CompTIA A+, N+ and I-Net+ vendor-generic certifications

Certifications – Pending:

Started training for RedHat Certified Engineer (RHCE) Linux exam, SANS GIAC GSEC, (ISC)² CISSP, other credentials

Certifications – Past/Legacy:

Cisco Security Specialist 1 (CSS-1) for Cisco PIX, IDS & VPN
Cisco Certified Networking Professional (CCNP)
Cisco Certified Networking Associate (CCNA)
Cisco Certified Design Associate (CCDA)
Nortel Networks Certified Design Specialist (NNCDS)
Nortel Networks Certified Support Specialist (NNCSS)
Nortel Networks Certified Account Specialist (NNCAS)
Microsoft Certified Trainer (MCT) – Inactive since no longer teaching but can be revalidated with a reapplication fee
Microsoft Certified Systems Engineer (MCSE) in Windows NT 3.51
Microsoft Certified Systems Engineer (MCSE) in Windows NT 4.0
Product-specific Microsoft certifications in Exchange 5.5, Proxy 2.0 and others
Microsoft Certified Product Specialist (MCPS) in Windows NT Server 3.51
Microsoft Certified Professional plus Internet (MCP+I)
Certified Novell Administrator (CNA) in Novell NetWare 4.11
CheckPoint Certified Security Administrator (CCSA) for Firewall-1 / VPN-1 v4.x
CheckPoint Certified Security Expert (CCSE) for Firewall-1 / VPN-1 v4.x
IBM Warranty Service Certified (WSC) – Predates IBM PSE & NSE certifications for servicing servers
Other software certifications on many legacy products stretching back into the MS-DOS era
Numerous hardware certifications from previous careers on hardware by IBM, Lexmark, Panasonic, etc.