

IT Infrastructure Management Network Devices and Systems

Installed, Supported and Managed by Tim Malone, MCSE

tim@3tcm.net or tmalonemcse@gmail.com
<http://3tcm.com> or <http://3tcm.net>

As of 23 January 2021

Comprising Recent Experience at Canoga Perkins,
Natren Probiotics and Valley Presbyterian Hospital

As well as Twelve years at Avjet Corporation
And Prior Relative Experience (1995 to 2005)

Typical Roles / Titles: Senior Network Admin, Senior Server Engineer,
Systems Admin, IT or IS Manager, IT Director, Infrastructure Architect

Network Devices.....	Pages 2-3
Systems Supported.....	Pages 4-6
Security Systems.....	Page 7
Active Directory.....	Page 8
Linux / Unix Experience	Page 8
Thin Client and VDI.....	Page 9
Certificates and Training	Pages 10-11

Network Devices (Firewall / Routers, Switches, Power Units and Wi-Fi Control)

I have been working with 802.3 networks since the early days of microcomputers. I started with Novell Netware on ARCNet, later on Token Ring, then on TCP/IP Ethernet. After switching to Microsoft NT as the OS, I installed and supported 10Base5 on Coax Thicknet, 10Base2 on Thinnet, then 10BaseT on twisted pair. With improvements in network speeds, I migrated to 100BaseT and finally Gigabit Ethernet with 10gbs fiber ports for SAN and multiple VM hosts. Core switches now run at 10G, w/SFP+ connectors, as an HA pair. They are used primarily for iSCSI traffic between our various SANs and our VM hosts, segregating & isolating core traffic.

Network devices I support include most leading brands of Firewalls / Routers, Switches, Hubs (rarely used any more) Internet Link Devices, Phone Systems (SIP / VoIP), Wireless Access Controllers, Network Video Recorders, Camera systems, Alarm Systems, Copiers, Postage Machines, Wiring Centers, UPS devices, facility electrical generators and Fire Control panels. If it uses electricity and plugs into a network, I have been responsible for managing the device. I am familiar with most UI and many command-level OS interfaces for these network devices:

Network devices I have installed, manage and support at Canoga Perkins (Sep 2018 - present):

- Fortinet Fortigate 100F HA Active-Passive Pair, w/FortiGuard, supporting 1Gb Internet
- I upgraded the primary HA pair twice from 200A and 200D units as we increased speeds
- Fortinet Fortigate 80C (Backdoor) supporting 100M for SSL VPN's and IPSec tunnels
- Fortinet Fortigate 60D at remote East Coast offices and another 80C for our test lab
- Two NetGear 28-port 10G DAC SFP+ Managed Pro Switches, L2+/L3 Lite (XS728T)
- Six HP ProCurve 2910al-48G (J9147A) 48-port Gigabit Layer 3 Ethernet switches
- Dozens of NetGear 4-port & 8-port Fast Ethernet and Gb Ethernet workgroup switches
- Separate engineering test network running on Cisco Catalyst ws-c6509-e 100M & fiber
- Adva FSP (Fiber Service Platform) 150DDf-825 – 1Gb Spectrum / TPx Internet Link
- Cisco IAD 2432-24FXS – Provides SIP trunking and 24 FXS ports (POTS eliminators)
- HikVision DS-7616NI-I2 / 16P NVR (Network Video Recorder) with 16 5MP Cameras
- Large Data Center Structured wiring center management patch panels – over 300 drops
- Ademco Vista 128FB Commercial Fire and Burglary Alarm Partitioned Security System
- Program and maintain Linear AK-11 Exterior Digital Keypad on our main security gate
- (4) APC SMT3000RM2UNC Smart-UPS 300 RM 2U 3000VA Network Power Systems
- Canon Image Runner Advance IR ADV 6265 Digital Multifunction Imaging System
- (3) Xerox VersaLink B7035 Workgroup Multifunction Printer / Scanner / Copier (MFP)
- Ubiquiti Networks Unifi Wi-Fi Controller managing seven devices / WAPs – 65K Sq Ft

Network devices I installed, managed and supported at Natren Probiotics (Oct 2017 - Sep 2018):

- Three Palo Alto PA-220 NextGen firewalls with threat prevention and URL filtering
- Multiple Juniper Switches: EX3400-48T (core), EX2300-48P and EX-2200-24P (edge)
- Multiple Cisco Small Business WAP361 Gb AC/N to replace old 802.11 a/b devices
- Eaton 9170 12kVA UPS unit for new data center, multiple APC & Tripp-Lite UPS units
- Juniper SRX320 Secure Services Gateway – security appliance / gateway (replaced)
- Dell PowerConnect 5448, 3348, 2234 and 2748 switches, mostly 10/100 (all replaced)
- 3Com 2824-SFP old 24-port 10/100 switch (replaced), HP Aruba 2530-8 PoE (replaced)
- Replaced multiple Netgear unmanaged workgroup switches extending old 10/100 LAN

Network devices I managed and supported at Valley Presbyterian Hospital (Jun to Sep 2017):

- Dozens of Juniper EX4300 & 3400 core switches with EX-2300 & 2200 edge switches
- Cisco IronPort C170 Email Security Appliance and several Juniper SRX firewalls
- Citrix Netscaler ADC MPX – Application Delivery Controller (not my primary focus)
- I managed over 200 HP and Ricoh Enterprise printers on multiple subnets or floors

NOTE: My time at Valley Presbyterian Hospital was intentionally a short-term engagement I worked with outside Meditech vendor to implement follow-me printing w/tap and go logins

Network devices I installed, configured, managed and supported at Avjet (2005-2017):

- Fortinet Fortigate 100D Next Generation UTM firewall Network Security Appliance
- Juniper SRX240H2 Secure Services Gateway NextGen UTM Firewall (replaced)
- Pulse Secure (was Juniper) Gateway MAG2600 SSL VPN Security Appliance
- Multiple Juniper GbE switches, 48 and 24-port, EX-4300, EX-3300 & EX-2200
- Multi-location Juniper Netscreen 5GT and SSG5 Firewall Security Appliances
- A half dozen Wireless Access Points, Linksys / Cisco and later Asus brands
- Multi-location Cisco PIX 506e Firewall Security Appliances, later replaced
- Multiple Cisco Catalyst 2960G, 3560G, 24 port and 48 port GigE switches.
- Multiple Cisco Catalyst 2950 and 2960, 24 port and 48 port 10/100 switches
- Multi-location DSL and T1 modems connecting AT&T and backup ISP links
- Multiple HP and 3Com 10/100 managed switches – retired in GbE upgrade
- Numerous 10/100 and GbE workgroup switches, later replaced with home runs
- Multiple APC UPS units for each server room, providing two hours battery time
- About forty Enterprise & workgroup printers – HP Color LaserJet and OfficeJet

Network devices installed, configured, and managed at previous employers (1995-2005):

- Watchguard Firebox III 7.0B2 with VPNs to plants in Mexico and San Diego
- Multiple 3Com 10/100 and Netgear 100/1Gb managed backbone core switches
- Linksys, 3Com and Netgear & d-Link unmanaged workgroup hubs and switches
- CheckPoint Firewall-1 on NT Server 4.0 with VPN-1 Secure Remote Service
- Cisco 1600 router IOS 11.1, Cisco 2501 Router, FastComm Frame Relay routers

While I could also list dozens of other network devices from the early years of my career, most are not in use today and therefore not applicable. The concepts and experience gained from these devices, however, still form the basis for my foundation in how I manage IT support, admin, troubleshooting, management, and skill development. No IT professional can know everything about every device or technology out there, but with the basic skill of lifelong learning, core competencies are kept relevant and new skills can be quickly picked up and utilized daily.

NOTE: Current high-priority network upgrade project for 2021 is virtualizing our old Red Hat ERP servers, currently running in a fail-over environment with an AWS EC2 warm backup. The goal is to upgrade Red Hat to a currently supported version, ensure no degradation of QAD ERP performance and virtualize the servers so we can use Veeam to make image backups to improve our backup and disaster recovery time from days (our current benchmark) to just a few moments.

Systems Supported (Servers & Server OS, SANs, NAS, DASD, Backup, Etc)

I have been supporting Microsoft, Novell and Linux Servers for over twenty-five years since 1995 (MCSE since 2000). My specialty has been supporting SMB Small to Medium Business market with typically less than 200 workstations. In my role as an IT or IS Manager, I have managed the servers, the WAN, the LAN, the workstations, Active Directory, Email, and all application servers including accounting systems (some ERP / MRP) and Office applications. Focus most recently has been on VMWare, ProxMox, Hyper-V and other virtual environments.

Server Operating Systems, Hardware and Applications I support at Canoga (2018-present):

- Microsoft Server 2019, 2016, 2012 R2, 2008 R2, 2003 R2, 2003, 2000
- HPE DL360 G9 VMWare ESXi Hosts - Dual Processors w/10 cores & 384GB memory
- HPE DL180 G9 Dedicated Backup server with attached 1/8 G2 LTO6 Tape Autoloader
- HPE MSA 2040 SAS DC SFF 21.6TB (Raw) SAN RAID 5, Dual HBA P-A Controllers
- Dell PowerEdge Servers: PE 2900, 1950, R820, R410, R420, R510, R630, R730XD
- Tegile T4100 C3 14.5TB (26TB Raw) SAN IntelliFlash RAID 60 Dual Active-Active
- VMWare ESXi 6.5 Essentials Plus, VCenter Server 6.5 Essentials, vMotion, HA, 6 CPUs
- Red Hat Enterprise Linux Server release 5.11 (Tikanga) in Dual Hot failover config
- QAD Mfg/Pro Enterprise Resource Planning ERP System Release eB2.1 SP6 2007.1
- Multiple installations of Debian and Ubuntu (16.04, 18.04, 20) servers and workstations
- ProxMox VE (Virtual Environment) 6.2 – a powerful Open-Source VMWare alternative
- FreeNAS open-source (NAS) OS based on BSD and ZFS with integrated RAID support
- Microsoft Exchange Server 2016 with high availability and load balancing in a DAG
- Veeam Backup and Replication 10.0 for VMWare, Hyper-V, Linux and Windows
- Ensured completion of daily and weekly backup jobs - offsite tapes cataloged and rotated
- Managed Active directory, DNS, DHCP, FTP, SSL & IP-Sec VPN, RDP, VNC, WSUS
- Supported hundreds of all versions of Windows 10, 8, 7, XP, and even older 2000 & NT
- Supported Office 2010, Webmail, EOP, Visio, Project – preparing to migrate to MS365
- Supported Corporate versions of OneDrive, DropBox, Zoom, Slack, & marketing tools
- Created and managed AWS EC2 instance for warm-failover of Red-Hat QAD backup
- Vertical IP2500 Wave ViewPoint VoIP hybrid phone system w/SIP Trunking & FXS
- Admin support for multiple Buffalo TeraStation 3210DN 8TB NAS in customer DMZ
- Team management of ADP Payroll site – maintained company page, details, menus
- Created and maintained complex company website in WordPress, hosted on GoDaddy
- Used advanced network scanning tools to ensure no rogue servers or malicious IP devices
- Maintained eSET 8 End-Point Anti-Virus protection tool for all endpoints and servers
- Setup and managed Azure Active Directory sync as part of our Office 365 Protection
- Managed all domain name registration and external DNS on GoDaddy through CPanel
- Researched, tested, installed and managed Mayan EDMS document control system
- Supervised installation and now manage Tyco / Johnson access control system (doors)
- Managed and maintained company Intranet in PHP and WordPress – links to key tools
- Maintained Spiceworks helpdesk ticketing system – ensured my tickets closed each week
- Provided helpdesk support via Remote Desktop, TeamViewer, VNC or No Machine
- Installed and maintained XWiki – IT documentation system for settings, configs, etc
- Implemented PRTG Network Monitor and Nagios for monitoring uptime and bandwidth

Server Operating Systems, Hardware and Applications I supported at Natren (2017-2018):

- Microsoft Server 2016, 2012 R2 Std, 2008 SP2 Std & 2008 R2, 2003 & 2003 SP2 Ent
- HP ProLiant DL360 G3, 380 G3, G5, G6, G7, Dell PowerEdge R710, R730, T110
- Replaced above physical servers with three Dell PowerEdge R630 VM Hosts
- Multiple Dell PowerVault 3U MD1000 DASD with 15 SCSI 2TB max per array
- VMWare ESXi 6.5 Essentials Hypervisor, Data Protection, High Availability (HA), vCenter, vMotion, Cross Switch vMotion, vShield Endpoint and Replication
- HPE Nimble Storage CS1000 Hybrid Dual Controller 10GBase-T 20TB SAN
- Replaced failed Quantum Scalar 50 tape LTO4 robotic backup library with D2D unit
- Managed the backups on Symantec Backup Exec 2010 until replaced with Datto Siris
- Datto Siris 3/NAS 3 Professional 10000 10TB D2D backup with cloud replication
- Microsoft Exchange Server 2010, Microsoft Office 2007 – migrated to O365 E3
- Microsoft Windows desktop products supported: 10 Pro, 8, 7 Pro SP1, XP Pro SP3
- Microsoft Dynamics Great Plains 2015 ERP System on MS SQL Server 2012 SP2
- Administer GP Management reports, SQL Server Reporting System, Jet Reports
- Administered other custom VB / Visual Studio programs on SQL Server 2008 R2
- Supported Miva Merchant e-commerce storefront w/Cybersource payment processing
- Managed Vertical IP2500 Wave ViewPoint VoIP hybrid phone system – 3 locations
- Provided support for Mac users, iPhones, Adobe Creative Suite, common browsers
- Managed Active directory, DNS, DHCP, FTP, SSL & PPTP VPN, RDP, VNC, WSUS
- Created network diagrams in Visio, documented internal & external IP addressing
- Managed Co-Lo servers for storefront, GoDaddy and ICANN registrations & renewals

Server Operating Systems, Hardware and Applications I supported at VPH (Fall 2017):

- Microsoft Server 2012 & 2012 R2, 2008 SP2 Std & 2008 R2, 2003 & 2003 R2, 2000
- VMWare vSphere 4, 5, 5.5, 6 and 6.5 along with VMWare Horizon View VDI 6 & 7
- In my role at VPH I focused on Active Directory, VMWare and Print Server support
- Dell EMC CMS and VNX NAS along with older Dell EMC Celera NS-480 NAS
- McAfee ePolicy Orchestrator EndPoint Security Anti-Virus Management protection
- Quantum Scalar i40 robotic tape library LTO5 running Symantec Backup Exec 2013
- Dozens of physical servers: HP ProLiant DL360, DL370 and DL380, G5 through G9
- HP Blade C7000 containing sixteen BL460c hosts for over 200 virtualized servers

Server Operating Systems, Hardware and Applications I supported at Avjet (2005-2017):

- Microsoft Server 2012 & 2012 R2, 2008 & 2008 R2, 2003 & 2003 SP2, 2000
- VMWare ESXi 5.5 Enterprise + Storage VMotion Clustering / High Availability
- HP ProLiant DL360 G5 & DL380 G7 servers (Six VMWare hosts), 64GB memory
- HP Lefthand P4500 10TB iSCSI SAN, Mirrored on 10 Gb fiber, two data centers
- Datto Siris 10TB D2D backup device with hourly backups and offsite replication
- Microsoft Exchange Server admin, updated regularly - 2013, 2010, 2007, 2003
- Microsoft Office 365 including OWA, 2016, 2013, 2010, 2007, 2003, XP, 2000
- Microsoft Windows desktop products: 10, 8, 7, Vista, XP and all earlier versions
- Sage MAS500 ERP Accounting, Abra Payroll, MS SQL Server 2012, 2008, 2005
- Adobe Acrobat, Adobe CS3, Symantec Backup Exec 11, 12, 2010, 2012, 2014

Server Operating Systems, Hardware and Applications supported previously (1995-2005):

- Microsoft Server 2003, 2000, NT Server 3.5, 4.0, NT 4.0 Terminal Server edition
- Novell Netware 3.1, 3.11, 4.0, 4.1, Citrix WinFrame, Metaframe 1.8 with ICA
- Three Red Hat Enterprise Linux AS 2.1 servers, scripting in PERL, Java 1.3.1
- SCO Open Server Rel V Unix running early version of proprietary MRP System
- Numerous early HP Compaq servers - Proliant ML370 G3, ML350, 1850R
- Alpha Micro AM6000, AM7000, AMOS, dBASIC, Metropolis, AlphaMRP
- Progress 9.1D SP8 with SQL-92, Webspeed, Tomcat, QAD Mfg/Pro EB2 SP4
- Macola 6.2 and Macola Progression 7.5 MRP, Genesys MRP from Point4 Data
- Microsoft Windows XP, 98, 95, 3.1, MS Office XP, 2003, 2000, 97, 95, 4.0, 3.0
- Data Direct Tech ODBC 4.2, Lotus Domino Notes R6.01, Crystal Reports 8.5
- Veritas Backup Exec 8, 9, 10, 11, Quantum Super DLT 320GB Tape Backup Unit
- MS SQL Server 2000, Computer Associates eTrust Anti-Virus, Office XP & 2000
- MS Project 2002, MS Visio 2002, MS Access 97, 2000 & XP, Tiny Term, Hyena
- Pervasive PSQL and Btrieve embedded database, Norton AV, SurfControl filter
- Cheyenne ArcServe, PC Anywhere, VNC, HP Jetadmin, MS Office 97, dBASE III+

I used these systems to provide computing, storage, backup, security, access control, remote administration, email and other communication services to the company. In addition, I supported enterprise accounting and resource planning as well as numerous applications specific to the flight operations market such as aircraft maintenance, scheduling, flight planning, charter operations and flight awareness or aircraft situation and tracking. At Valley Presbyterian Hospital I was part of a team deploying Windows in a remote computing VDI Virtual Desktop Environment using VMWare Horizon View and MS Remote Desktop in a tap-and-go setup.

I am an experienced network troubleshooter. I am an MCSE with CCNA and VMWare training. My responsibilities have always included being the individual in charge of providing 99.99% uptime on the LAN, WAN, servers, the SANs, routers, switches, firewalls, Internet links, VoIP, workstations, and other critical devices. Although every IT professional uses outside services to complete initial tech projects, I have always provided level three support for each of the devices on our network, fine-tuning or replacing each of them to support company growth over the years.

I have always worked extensively with outside engineers and IT support organizations. No single IT professional can know it all or manage all the systems required to successfully run a large or multi-location enterprise. I have been part of a team of thirty-five at VPH (over 2,000 endpoints) and have worked as a solo IT Manager at several small manufacturing companies. There is no way even a large team of professionals can roll out new and specialized devices and systems that bring a competitive edge to an enterprise without the assistance of outside expert organizations.

Security Systems and Devices

In my role as IT and IS Manager, I have ensured my employers and co-workers were protected from intrusion, malware and cyber-attacks using firewalls, secure gateways, SSL & IPSec VPNs, enterprise anti-virus and anti-spam software, web filters and robust business continuity systems including offsite disaster recovery solutions. I have many years of hands-on experience removing ransomware, viruses, malware, adware, Trojans and key loggers from workstations, laptops, and servers. I respond quickly to emergency situations, no matter what the hour or day of the week.

I have also learned from sad experience that we can never let up on employee education about how to recognize and be wary of scam and phishing email. I have witnessed phishing campaigns that have lasted for years, always targeting key individuals in finance, purchasing, and executive offices. In my ongoing tests, there has never been an occasion when at least a few individuals have not responded inappropriately by clicking on a link they should not have. Thus, I send out company-wide reminders on a regular basis with news of the latest hacks and phishing events.

While not a certified security professional, I continue to read the US-CERT releases, and keep up with reports of scams, hijacks, and email hacks. Most modern email filters block attachments that are infected, but phishing and especially spear continues to be the greatest threat to the company. I am aware of competitors who have had to pay millions in bitcoin to get decryption keys to their files. That's why I make hourly backups of all my key servers and keep them safe offline always available to restore complete folders and mapped drives, which I have had to do.

Security systems I installed, managed and supported while employed at Canoga (2018-present):

- eSet 8 Enterprise-managed Anti-Virus, Anti-Malware, endpoint Internet Security system
- Exchange Online Protection (now part of MS 365) incoming and outgoing spam filter
- Fortinet Fortigate firewall policies, VPN user authentication, unified threat management, intrusion detection and prevention, infected website detection, deep packet inspection
- Veeam Backup and Replication with daily and more frequent backup of critical servers

Security systems I installed, managed and supported while employed at Natren (2017-2018):

- Symantec Endpoint Protection suite and Symantec Mail Security for Microsoft Exchange
- Palo Alto PA-220 NextGen firewalls w/threat prevention, URL filtering and SSL VPNs
- Datto Siris 3/NAS 3 Professional 10000 10TB D2D backup with cloud replication

Security systems I installed, managed and supported while employed at Avjet (2005-2017):

- McAfee EPO ePolicy Orchestrator Unified Security Management Endpoint Protection
- Barracuda Spam Firewall 300Vx AS / AV virtual appliance with cloud protection layer
- Commtouch (Cyren) Cloud-based Anti-Spam, Anti-Malware, Anti-Phishing protection
- Symantec Endpoint Protection centrally managed Antivirus for servers and workstations
- Forcepoint Enterprise URL Filtering (formerly Websense Web Filter & Security)
- Microsoft Exchange Online Protection (Forefront Online Protection for Exchange)
- Pulse Secure (was Juniper) Gateway MAG2600 SSL VPN Security Appliance
- Datto Siris Enterprise 10000 10TB D2D backup device with offsite replication

Active Directory Experience

In my role as an IT / IS Manager with full system administrator responsibilities and permissions, I have been working with Active Directory for over twenty years. I designed the structure and layout of the Organizational Units, Security and Distribution groups and Group Policy Objects. At Canoga Perkins, we manage about 180 objects, including users. At Avjet, there were more than 350 active users. Active Directory is tightly integrated with Exchange Server, which I have been managing since Exchange Sever 5.5 in 1997. I use AD daily and have since it came out.

My duties include managing the domain and the domain controllers through AD Domains and Trusts, managing our various locations on the WAN through AD Sites and Services, and adding, changing, or deleting user accounts through AD Users and Computers. I also ensure the critical functionality of DNS, DHCP and LDAP, creating and updating Group Policy, as well as Rights Management and file server permissions, all allowing us to remove redundancy and reduce error.

In each of my last four roles, I have continued supporting and administering all aspects of Active Directory, creating user accounts, managing distribution and security groups, server file permissions, ensuring group policy deployment, monitoring domain controllers work load and maintaining all objects in the domain schema, always striving for industry accepted practices. I am comfortable with tools such as users and computers, domains and trusts, sites and services.

Linux / Unix Experience:

I have been using Unix since about 1993 when I got connected online and started using a BSD shell account to navigate the Internet – right about the time NCSA Mosaic, the first browser came out. The company I was with at the time sourced material from various sites using FTP, HTTP, Gopher, and other early protocols. I also used SCO Open Server extensively from 1995 to 1998 as the underlying OS of the MRP system I was supporting for a manufacturing company.

I was introduced to Red Hat and QAD in 2002 when I moved to Ventura county and assisted another manufacturing company to convert from a proprietary Alpha Micro System to QAD, which ran under Red Hat Enterprise Linux AS 2.1 with scripting in PERL and Java. I was also introduced to WebSpeed and TomCat at this time, which I continue to use today in supporting QAD at Canoga Perkins. I believe I became a fairly proficient Red Hat Linux administrator over the next two years. I did not use Linux much after this position ended until I joined Canoga.

For the past two years I have used Red Hat, Ubuntu, Debian and a few other flavors of Linux as part of my daily administrative duties in managing the engineering and ERP servers at Canoga. I feel especially confident with Ubuntu 18.04, having installed and tuned it dozens of times for the various members of our engineering staff as they have ramped up new development systems. I am comfortable with both the server and the desktop version, again, because I use them daily.

Thin Client and VDI

I first implemented thin-client services in 1999 while replacing an old Novell Netware 3.11 system with NT 4.0 and two load-balanced Citrix servers for a manufacturing company. At another manufacturing company I supported Microsoft Remote Desktop on Server 2000. In a more recent role as the IT Manager / IT Director for Avjet Corporation at the Burbank airport, I implemented Remote Desktop Services running on Server 2008 under VMWare ESXi 5.5.

In addition to RDS, a server-based solution, and because our Flight Operations Software (FOS) required a LAN-based solution, I created virtual Windows 7 workstations for our remote users. Using a Remote Desktop client, they accessed their dedicated virtual workstation from their PC or Mac, laptop or tablet, giving them the freedom and ability to respond to demanding clients any hour of the day or night, including the ability to print to local or remote printers as needed.

Specifically, I initially used WinFrame and Metaframe in my installations of Citrix products 1999 to 2001 at Carson Industries. The major issue in those early days was finding or creating printer drivers compatible with Citrix ICA. Since Citrix ICA was incorporated into Windows Terminal Server, my VDI of choice moved to Terminal Services as it was less expensive. The Microsoft product and RDP improved over the years, so I used that exclusively from 2001 on.

My specific tasks were to design, configure and implement Remote Desktop Services for my employers and co-workers. I provided all training, troubleshooting and support, including all after-hours and weekend support for travelling and remote employees who needed to access their files and our Flight Operations System while on the road or working offsite. I also purchased, installed and maintained our secure VPN solution to ensure protected Remote Desktop access.

In a recent role as a Senior Server Engineer at Valley Presbyterian Hospital in Van Nuys, I worked extensively with VMware Horizon View, a VDI environment supporting thousands of employees. We employed “tap and go” technology that allowed doctors and other employees to switch sessions from one physical workstation to another in seconds using card readers. My specific project was to migrate the “follow-me printing” features associated with mobile clients.

In short, I have been using Remote Desktop since it first came out. It is a natural tool for network admins to manage their servers, which usually do not have dedicated KVMs attached. At Canoga Perkins we are now investigating and experimenting with VDI to replace the hundreds of aging old Windows XP and Windows 7 Workstations. Many of these are dedicated to specific tasks and not to specific individuals, making them a perfect candidate for a VDI environment. We are using one of our VMWare hosts to implement tightly running and tuned virtual W10 machines.

Training and Certifications

Professional Certifications:

MCP - Microsoft Certified Professional, 5-23-2000, MCP ID#1934419

MCSE - Microsoft Certified Systems Engineer, 2-8-2001, Same MCP ID#

CompTIA Certified A+ Exam and Certification, 7-6-2000

CompTIA Certified Network+ Exam and Certification 7-6-2000

College Degree:

Associate Degree from Mt. San Antonio College, Walnut CA, 13 June 1980

Technical Training Completed by Tim Malone

<u>Institution</u>	<u>Date</u>	<u>Summary</u>
New Horizons	11-9-2012	VMWare vSphere v5.0: Fast Track, 40 hours
New Horizons	8-9-2013	CompTIA A+ 2012 Certification Part 1, 40 hours
New Horizons	8-23-2013	CompTIA A+ 2012 Certification Part 2, 40 hours
New Horizons	6-28-2013	CompTIA Network + Certification, 40 hours
New Horizons	7-12-2013	CompTIA Security+ 2011 Certification, 40 hours
New Horizons	7-26-2013	CompTIA Storage + Certification, 40 hours
New Horizons	6-14-2013	CompTIA Server + Certification, 40 hours
New Horizons	11-15-13	CompTIA Linux + Certification, 40 hours
New Horizons	10-11-13	EC-Council Certified Ethical Hacker, 40 hours
New Horizons	11-8-2013	6241 Server 2008 Infrastructure, 40 hours
New Horizons	10-25-13	6433 Implementing Windows Server 2008, 40 hours
New Horizons	11-13-13	6420 Fundamentals of Windows Server 2008, 40 hours
New Horizons	1-18-2013	50331D Windows 7, Enterprise Desktop Support, 40 hours
New Horizons	3-1-2013	6419B Configuring Windows Server 2008, 40 hours
New Horizons	3-13-2013	6293A Supporting Windows 7 in the Enterprise, 40 hours
New Horizons	4-19-2013	10135B Managing Exchange Server 2010 SP2, 40 hours
New Horizons	5-3-2013	6425C Configuring Server 2008 Active Directory, 40 hours
New Horizons	5-15-2013	6292 Installing & Configuring Windows 7 Client, 40 hours
New Horizons	5-30-2013	6426C Config Identity & Access Server 2008 AD, 40 hours
Moorpark College	Fall 2006	CNSE M42 - Microsoft Windows Active Directory
Moorpark College	Spr. 2006	CNSE M43A - Windows Network Infrastructure Admin
Moorpark College	Spr. 2006	CNSE M44 - Designing W2K Dir Services Infrastructure
Moorpark College	Spr. 2006	CNSE M18 - Cisco Sys Computer Networking 1 & 2
Moorpark College	Fall 2005	CNSE M30 - Microsoft Windows XP Pro Administration
Moorpark College	Fall 2005	CNSE M31 - Microsoft Windows Network Server 2003
Moorpark College	Spr. 2005	CNSE M01 - Intro to Networks & Telecommunications
Moorpark College	Spr. 2005	CNSE M05 - Local and Wide Area Networks
Moorpark College	Spr. 2005	CNSE M13 - Internetworking and TCP/IP
Moorpark College	Fall 2003	CNSE M35 - SQL Server – Install & Configure – 40 hours
Moorpark College	Sum 2003	CNSE M71 - Windows Professional and Server for Techs
Moorpark College	Sum 2003	CIS M20 - Microsoft Word Part 1
Moorpark College	Spr. 2003	CNSE M17 - Cisco Sys Computer Networking 4

Moorpark College	Spr. 2003	CNSE M16 - Cisco Sys Computer Networking 3
Moorpark College	Fall 2002	CNSE M15 - Cisco Sys Computer Networking 2
Moorpark College	Fall 2002	CNSE M11 - Cisco Sys Computer Networking 1
MCSE Exam	12-6-2005	070-270: Installing, Config and Admin Win XP Pro
MCSE Exam	12-1-2005	070-290: Manage & Maintain Win Server 2003 Environ.
MCSE Exam	11-21-00	070-068: Implement & Support Server 4.0 in the Enterprise
MCSE Exam	2-8-2001	070-081: Implementing & Supporting Exchange Server 5.5
MCSE Exam	12-15-00	070-059: Internetwork with MS TCP/IP Windows NT 4.0
MCSE Exam	10-17-00	070-067: Implement & Support MS Win NT Server 4.0
MCSE Exam	8-24-2000	070-073: Implem. & Support MS Win NT Workstation 4.0
MCSE Exam	5-23-2000	070-098: Implementing & Supporting MS Win 98
MCSE Exam	6-15-2000	070-058: Networking Essentials
Microage	2-4-2000	803 - Administering MS Windows NT 4.0
Microage	2-25-2000	922 - Supporting MS Windows NT 4.0 Core Technologies
Microage	3-21-2000	688 - Internetworking MS TCP/IP on MS Windows NT 4.0
Microage	4-7-2000	689 - Supporting MS Windows NT 4.0 Ent. Technologies
Microage	4-28-2000	1026 - MS Exchange Server 5.5 Concepts & Administration
Matrix Consulting	3-12-2004	Intro to Progress Programming for QAD Mfg/Pro, 20 hours
Executrain	1-8-2001	Advanced HTML Programming, 8 hours
Executrain	12-11-00	HTML Fundamentals, 8 hours
Comp. Solutions	10-1-2000	Macola System Administrator
New Horizons	Aug 2000	Intermediate Crystal Reports, 8 hours
New Horizons	Aug 2000	Introduction to Crystal Reports, 8 hours
Productivity Point	Apr 2000	CTX-302 MetaFrame Administration, 24 hours
New Horizons	2-28-1997	Novell Netware 605 TCP/IP Transport, 16 hours
New Horizons	7-12-1996	Advanced Windows, 8 hours
Open Learning Ctr	6-25-1996	SCO TCP/IP & SCO NFS Administration, 8 hours
Open Learning Ctr	4-5-1996	SCO OpenServer Administration I
Phase One Sys.	8-20-1982	Oasis Basic
Vector Graphic	9-24-1981	Vector Graphic Technical Training, Service & Installation
Tri-Community	Spring 74	IBM System/3 Operations and RPG II Programming
Cal Poly Pomona	Fall 1988	English 301 - Business Writing
Citrus College	Spr. 1979	150 - Introduction to Basic Programming
Citrus College	Spr. 1979	222 - Cobol Subprograms
Mt SAC	Spr. 1980	DP48 - Data Processing Seminar / Work Experience
Mt SAC	Sum 1979	BUS20 - Principles of Business
Mt SAC	Spr. 1979	DP10B - Advanced Data Processing
Mt SAC	Spr. 1979	DP24 - Fortran IV Programming
Mt SAC	Spr. 1979	DP44 - Advanced RPG II Programming
Mt SAC	Spr. 1979	DP46 - IBM S/360 Assembler Language Coding
Mt SAC	Fall 1978	DP10A - Introduction to Data Processing
Mt SAC	Fall 1978	DP20 - Introduction to Systems Analysis and Design
Mt SAC	Fall 1978	DP26 - COBOL Programming
Mt SAC	Fall 1978	DP32 - Fundamentals of Operating Systems
Mt SAC	Fall 1978	DP34 - RPG II Programming