

**Objectives:** Secure a position as Solution Architect or Subject-Matter Expert (SME) for Cisco Collaboration Voice, Video, LAN, MAN, WAN, Security & Wireless Architectures solutions.

**Technical Highlights:**

- Enterprise-Wide Architect and SME supporting VoIP, Video, LAN, MAN, WAN, Security & Wireless Architectures
- Enterprise-Wide Cisco CallManager and CallManager Express Architectures and Implementations
- Sales Engineering of VoIP, Video, LAN, MAN, WAN, Security & Wireless Solutions
- Vendor Relations with major players including Cisco, HP & Compaq, Apple, Microsoft, Mitel, IBM, and APC
- Enterprise-Wide Operations & Support of Windows Servers, Workstations, and Apple Workstations
- Technology Research, Evaluations, Selections, Designs, Architecture and Negotiations with vendors

**Technical Skills:**

Cisco CCIE Voice Certified (Written 06/13) with Specialist in all networking areas within an Enterprise Implementation of New Enterprise Voice & Video Architecture including Pre-Sales Design, Implementation Plans, and Post-Implementation support. Design and implementation of Cisco CallManager Business Edition (BE) 6.x, 7.x, 8.x, 9.x based on C2XX Servers and VMWare Host Servers, Cisco CallManager CUCM 6.x, 7.x, 8.x, 9.x Enterprise with Cisco Unity Connection, Cisco CallManager Express and Unity Express 7.x, 8.x & 9.x IOS Based PBX, Cisco ASA (Adaptive Security Appliance) and Cisco Wireless Controllers

**Speaking Engagements:** Association of IT Professionals Gwinnett, GA Tech Chapter - July 2010 & September 2013

**Government Security Clearance:** NAC+I (National Agency Check plus Investigation) Confidential for Department of Defense (DoD) and US Treasury Departments – Internal Revenue Service (IRS).

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**Work Experience**

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*Tiverity has been in the professional services industry since 2003 and has been supporting both federal government and private corporations. The company based its guiding principles of integrity and customer satisfaction from the day to day work it does to the documentation it provides its clients while under the Professional Services, Voice and Data implementation roles it manages.*

**Sr. VoIP & Data Network Engineer – Atlanta, GA – December 2008 to Present:** Hired to help form Engineering division supporting VoIP, Video, LAN, MAN, WAN, Security & Wireless Architectures, roles include Pre-Sales, Design, Implementation and Post-Deployment support.

**Solution Architect & Sales Engineer:** Accompanied sales representatives on every call to provide the customer details as to the design process and provide solutions to them including project management of the implantation of the design. This provided customer with needed answers and prevented errors and delays that could have added costs to the project.

**VoIP Network Architectural Design Engineer -** Architect for multi-site deployment for Cisco CallManager 8.6(2) Business Edition solution – Supporting a central call processing solution over MPLS network. Complex inside sale staff model that is required to maintain a direct customer relationship. The system deployed has maintained a 99.99 % uptime since deployed.

**Data Network Architectural Design Engineer (Additional Responsibilities Awarded):** Replaced network vendor and placed in charge of new network design for client after success with VoIP deployment – LAN and WAN redesign for clarity with optimization in mind.

**VoIP & Data Network Architectural Design Engineer:** Project lead for Chamber of Commerce for Cisco VoIP Deployment near Atlanta, GA. Servicing 4 companies along with the Chamber in a tenanted configuration emulating 5 separate phone systems in one using Callmanager Express and Unity Express. Provided conference bridging & voicemail to all tenets including Presence to the desktop and handset.

**VoIP & Data Network Architectural Design Engineer:** Project lead for international corporation for VoIP, VMware Servers, and ASA Deployment. Migrated Firewall/VPN with Cisco ASA, deployed with latest ASA-OS 9.1(2) and ASDM with customer training and management. Deployed 3 Cisco C240 Servers with VMware 5.x and vSphere 5.x. – Upgraded and added Presence to Callmanager BE 5K

**VoIP & Data Network Architectural Design Engineer:** Project lead for international corporation for VoIP deployment with main site in Germany, and satellite sites in Pittsburg, PA and Atlanta, GA. Connections via point-to-point network providing full windows domain integration and future support for Cisco Callmanager Enterprise at main location.

**VoIP & Data Network Architectural Design Engineer:** Project lead for international corporation for VoIP deployment with main site in Atlanta, GA, and satellite site in Sydney, AU. Connections via VPN/QoS network providing integration with 4 digit dialing to remote site.

**VoIP & Data Network Architectural Design Engineer:** Project lead for international organization VoIP deployment with main site in Italy, and satellite site in Atlanta, GA. Connected via point-to-point network providing full windows domain integration and future support for Cisco Callmanager Enterprise at main location with Callmanager Express providing 4 digit dialing between locations.

**VoIP & Data Network Implementation Engineer [Service Contract]:** Outsourced IT support for entire company for main and multiple remote sites – Cisco VoIP phone system, Cisco Wireless and Cisco ASA Firewall. Management of outsourced Exchange email in a Windows and Macintosh environment.

**VoIP & Data Network Implementation Engineer:** Project lead for Atlanta, GA. Manufacture – VoIP deployment using a Cisco UC540 (CME) solution with wireless and remote access requirements, integration with Dell switches, as well as deployment of Cisco's IP Communicator in a wireless environment.

**Internal IT Engineer:** Created and designed the internal network for the company to implement a working phone system to support Tiverity staff as well as provide a demonstration area for clients when visiting the offices. Technologies implemented including new LAN design for Voice, Data and Wireless traffic. Provided the security required for protecting the network with Cisco ASA 5520 that also supports the VPN connectivity for the staff including remote IP phones and access to internal training lab.



**at&t** AT&T has over 310,000 employees and is the industry-leading provider of voice, IP-voice, video, and data communications services. Its network spans the globe reaching every major country and metropolitan area through its subsidiaries and affiliates. The company's client list includes all of the FORTUNE 1000.

**Sr. VoIP & Data Engineer – Contractor at DOD facility (Under Sub-Contract) – Dallas, TX – August 2008 to November 2008:** Team member to implement and document a Cisco IPT and IPCC (Cisco Unified Contact Center) solution for the financial division of a Department of Defense facility dealing with both current and former members of the US Military.

Responsibilities included implementation and documentation of Cisco IPT/IPCC/ICM/CVP environments for government and public sector customers. Hardware deployment and software management in helping the team develop a way of streamlining the implementation process. Worked with the customer and vendors to achieve milestones within the contract – being a late addition to the team this provided justification to expand the contract including hardware/software/staff.

Worked with the team and vendors to develop requirements for firewall access into and out of the departments Payment Card Industry (PCI) Data Security Zone to facilitate the access required for Verint Ultra 10 deployment including Screen & Voice recording as well as Work Force Management (WFM) with encryption. This installation also included ACH (Automated Clearing House) servers inside the PCI Zone.

Developed installation documentation and both logical and physical drawings of the environment including the call and data flow to and from the systems. Documentation also included a custom installation process with the customer's configuration settings. Screen captures of the installation were provided for both visual as well as procedural processes developed into an easy to follow guide to replicate installation.



**MATRIX INTEGRATION** Matrix Integration, Jasper, IN: Matrix has been in business for over 30 years. Matrix provides technology solutions to businesses and public institutions nationally. Matrix offerings span IT infrastructure, networking services, and both IP & traditional phone systems.

**Sr. VoIP & Data Engineer – October 2006 to July 2008:** Responsible for Corporate Voice and Data solutions using Cisco CallManager, Cisco Unity and Cisco CallManager Express, HP/Compaq, and Mite for Voice, Data, Wireless & Video solutions into one managed network.

Responsibilities include implementing Voice, Video, Wireless and Data networks to support both medium and large Public and Private sector organizations with the highest level of availability. I had been placed in a hybrid role that combined Legacy Voice, IP Voice, Wireless, IP Video, LAN, MAN and WAN Data areas of the infrastructure handling both the design and implementation of that design for a complete solution.

**Lead Implementation & Support Engineer:** *Public Entity - Library 2008* - Deployment of Cisco CallManager 6.x BE with Integrated Unity Connection 2.x –Cisco Voice design and deployment services. Providing Advanced IP Services and Network & Technology upgrades & installs for Advanced Projects. Focus was Advanced VoIP (QoS) Infrastructure Design, Data transport over Copper, Fiber, and Wireless Voice deployment with Cisco 79xx series phones including Attendant Console and Berbee Informacast paging. The solution had two PRIs, one at two different locations as backup to the other with SRST & MGCP support for failure of CallManager, and two analog trunks at each gateway to handle any failure and provide outbound and 911 access. One site was brought up in a CallManager Express solution until full deployment of the CallManager allowed for integration. Trained the local IT staff on operations and manipulation of the system for self-management.

**Lead Implementation & Support Engineer:** *Public Entity - Library 2008* - Deployment of POE Switching fabric to support VoIP solution for five public sector locations with multiple VLANs for support of Data, Voice (QoS), Wireless, Secure Wireless, Video Surveillance and Management. Applying this solution with as little disruption as possible to the customer in the production environment. Paging solution support with routed multicast traffic to all sites. Handed all data to ISPs fiber network for transport to remote sites.

**Lead Implementation & Support Engineer:** *Public Entity - Hospital 2007* – Deployment of Cisco Call Manager Express with integrated Unity Express into clinic replacing legacy phone system. In conjunction to the phone system, I deployed three other sites that were CallManager Express ready with Point-to-Point T1s between main site and remote sites. Systems Handled both T1 for Data and PRI for Voice.

**Lead Implementation & Support Engineer:** *Public Entity - University 2007* - Deployment of Cisco Call Manager Express with integrated Unity Express into campus replacing legacy phone system and to support expansion of campus with new offices and classrooms. Integrated with HP Switching Fabric and multi-VLAN support for phones and data. Trained the local IT staff on operations and manipulation of the system for self-management.

**Lead Implementation & Support Engineer:** *Public Entity - University 2007* - Deployment of Cisco Call Manager Express with integrated Unity Express into new campus. Integrated with Cisco switching fabric and multi-VLAN support for phones and data. The Cisco 2811 was also the data link to the main site via T1 running BGP. Provided additional solution for small call center functionality for marketed registration services.

**Support Engineer:** *Private Transportation Company 2006* – Replaced legacy phone system with Mitel 200 ICP phone system that was integrated with Cisco Switches and Routers with PSTN analog lines as the trunks to inbound and outbound communications. DHCP changes to support Mitel phone system were required as well as modifying each phone to provide communications to controller. Integrated voice mail system also configured with auto-attendant.

**Project Management:** *All Projects* - Worked with the client, company, client vendors and subcontractors to facilitate installations for LAN / WAN / MAN and Telco connectivity. This allowed connectivity to end points as well as to other locations inside and outside the client facility.

**Design Engineer:** *Multiple Projects* – Worked with sales and project manager's teams to design solutions in which all required deployments, as well as product selection, and time lines that fit the customer's requirements to provide a total solution from start to finish.



*Convergence Systems, San Diego, CA: A company that provided consulting, design, and installation of voice and data systems, data centers, IP & traditional phone systems and security. Company closed in early 2007.*

**Sr. Voice & Data Engineer** – *January 2006 to July 2006:* Responsible for building the IT department to enhance customer satisfaction and deployment of Voice, Data, HVAC, and Power requirements.

Responsible for managing Mitel VoIP phone systems including SX-200 & 3300 ICP systems with Mitel Teleworker, Your Assistant and SpectraLink wireless phone system. My roles included that of VoIP engineer, vendor contact, customer relations & engineering, project management and trainer.

#### **Assignments included:**

**Lead Implementation, Sales & Support Engineer:** *Video Editing Suites Leasing Company - 2006* – Deployed Mitel 3300 ICP VoIP Enterprise PBX with POE Switching Fabric to provide partitioned solution to users of the separate Video Editing Suites to have PBX powered phone system with a separate voicemail. This solution included SMTP transfer of voicemail to email. Phone twinning (Mobility) was deployed to provide customers complete access to phone system even when not in the office. Solution utilized two channelized PSTN T1s for inbound and outbound traffic as well as analog support for each suite for fax and modem if needed. Wireless SpectraLink phones were offered and deployed with Cisco APs. Provided training to the IT staff for management.

**Lead Implementation & Support Engineer:** *Financial & Mortgage Company - 2006* – Deployed a VoIP Phone Solution with a Mitel SX-200 ICP VoIP PBX with PoE Switching Fabric to provide a small scale call center to respond to advertising in the mortgage market. Live answer point then sent calls to associates as needed with full voicemail solution.

**Lead Implementation & Support Engineer:** *Large Legal Firm San Diego Office - 2006* – Deployed a VoIP Phone with a Mitel SX-200 ICP VoIP PBX with PoE Switching Fabric to provide access to clients and provide reporting of calls with access numbers for billing. Once installed additional features were provided to the operators and administrative assistant's workstations (Mitel "Your Assistant") thus giving Presence, Phonebook, and Chat to the operators and executive assistance.

**Lead Implementation & Support Engineer:** *Largest West Coast Veterinary Hospital - 2006* – Deployed a VoIP Phone with a Mitel SX-200 ICP VoIP PBX with PoE Switching Fabric and SpectraLink Wireless phones to support the veterinarians needs for mobility. A channelized PSTN T1 was used for communications and analog lines came off that connection for fax and low end wireless phones.

**Lead Implementation, Sales & Support Engineer:** *Private medical supply company 2006* – Deployed a VoIP Phone with a Mitel SX-200 ICP VoIP PBX with PoE Switching Fabric into a new environment on a separate network including private labeled switching fabric and PSTN T1 voice trunks. Setup Auto Attendant and provided Presence for all of the management & office phones with phone based paging. Proprietary MoH solution integrated into system.

**Lead Implementation Engineer:** *Convergence Systems Remote VoIP Solution – 2006* – Deployed a VoIP Phone with a Mitel SX-200 ICP VoIP PBX with the Teleworker (Phone Proxy) remote VoIP solution to provide small business customers VoIP PBX technology over the public internet, partitioned system for four customers that required between 5-14 phones with voicemail and line presence. This was recurring revenue to the company and was active when I left the company.

**Lead Implementation, Sales & Support Engineer:** *Multi-site Moving & Storage Company - 2006* – Deployed a VoIP Phone with a Mitel SX-200 using the Teleworker remote VoIP solution for 3 - 5 phones per site. Phones were deployed with system-wide paging and line monitoring for management. Solution utilized PoE injectors at each site and worked with POW Switching Fabric at main site. ACD was used for call routing to each site as needed, utilizing system almost as a call center.



*NCR Corporation, San Diego, CA: A \$6.5 Billion global technology company, with 29,000 employees, that provides solutions designed to enable its customers to build, expand, and enhance their relationships with their customers.*

**Sr. Network Engineer - October 1997 to December 2005:** Projects included converting the San Diego campus from shared media to Cisco switched network using 65xx and 45xx Catalyst switches (COS & IOS) for over 5500 ports with Gigabit Uplinks to Core-Routers/Switches. Assisted in deploying of Cisco VoIP along with the replacement of all legacy switches with Cisco 65XX switches with Inline Power (PoE) in an ongoing migration from the legacy Avaya PBX to a Cisco VoIP Enterprise deployment.

Managed Windows NT Domain for San Diego campus with over 50 servers including User, DNS, DHCP, print services and file services prior to a consolidation to Network Appliance NAC. Migrated over 1400 hosts in San Diego to DHCP and 1200 hosts in Columbia, SC to DHCP, then converted again from Microsoft DHCP server to NetID DNS/DHCP solution from Nortel.

#### **Assignments included:**

**Network Engineer:** *Site monitoring – Configuration Management – 2006* – Worked to resolve network management needs for a large campus environment. When a solution was put in place, use of the enterprise class software called Orion by SolarWinds was used. This provided detailed reports of each port in the system as well as errors and benchmarking of performance. The solution required a dedicated server and provided viewable web pages to the IT staff within other departments and helped in cost justification for additional upgrades if needed. This solution worked in conjunction with CiscoWorks 2000 to provide an end-to-end view of the campus network.

**Network Engineer:** *Migration Project from Shared Media to POE Switch Fabric for Office areas – 2005* – Assignment included challenges to bring the existing network infrastructure into a stable condition, identifying critical single points of failure and preparing plans for essential fix-up of design shortcomings. It was also necessary to implement the new PoE Switching Fabric for Cisco CallManager deployment. Migration included using two Core 6509 CoS based switches with 720 Management Modules for redundant links to 24 65xx IDF switches. Both Core switches used redundant Gigabit links to each IDF as well as redundant links to connected 7200 routers for WAN access – redundancy was also implemented with HSRP on the 720's integrated router (MSFC). The routing protocol was EIGRP in the internal LAN to BGP to the ISP.

**Network Engineer:** *Migration Project from Shared Media to Switch Fabric for R&D Labs – 2004* – Deployed into 40,000sf of R&D labs that support the NCR hardware for the Teradata product line. Deployment of Cisco's 6513 switches with Switch Fabric Modules (SFM) were implemented to upgrade bandwidth from the existing 32 Gbps to 256 Gbps on the labs switching backplane. The SFMs were used in all four 6500 switches located in the labs for additional capacity. To disperse the ports, a system was devised to patch directly from the 48 port switch blades to 48 port patch panels. Those connections were then extended via 8 Cat5 amphenol connected 50 pair cables to amphenol patch panel in an areas in the labs that needed the ports. This saved the expense of additional switches being located around the labs. Cisco 45xx Switches were used in smaller labs.

**Server Engineer:** *Migration Project from Windows based DHCP to Nortel NetID DHCP Solution – 2003* – Provided design and project managed the installation & implementation of a new DHCP infrastructure. Collected the current Windows Server DHCP configurations and setup local servers that ran the new DHCP software. Worked throughout the nation to support the new requirements and locate exceptions to the standard settings of each. Once established, the actual migration took a few hours and required changes on the network routers to point to the new DHCP server (IPHelper command) supporting each region.

**Y2K support engineer:** *Emergency response team member for Y2K transition – 1999* – Selected to join the Y2K team to address the upcoming transition of moving from year 1999 to 2000 (Big Round Number) for NCR's west coast facilities. Transition went without a problem thanks to our team upgrading all workstations, servers, and network equipment.

**Workstation Engineer:** *SMS deployed and unattended installation project – 1998* – Worked with the deployment of Microsoft SMS (Microsoft Systems Management Server) for workstation software deployment system. This was used for application deployment as well as patch and virus definition updates.



*En Pointe Technologies, El Segundo, CA: A national provider of information technology products and value-added services with a customer base consisting primarily of large and medium sized companies and government entities with 450 employees.*

**National Network Engineer - October 1994 to October 1997:** Administered the sites LAN with 3Com switches that supported the desktop, server farm, and troubleshooting network related issues. Responsible for network security inside and outside the site, including abuse of LAN/WAN resources. Assisted in the support of WAN by managing routers to establish Frame-Relay connections over fractional T1 lines to communicate with 12 remote sites and remote servers. This also included travel to all sites.

**Assignments included:**

**National Network Engineer:** *Support and Deployment of WAN connectivity to remote sites – 1996* – Managed Telco cloud for Fractional T1 Frame-Relay WAN which was implemented on Cisco 25xx routers. Provided day-to-day maintenance, change management, and full configuration support to remote sites.

**National Server Engineer:** *Migration Project from Windows 3.51 & Novell to Windows NT 4 – 1995* – Managed the migration from Windows 3.51 & Novell environment with local users to a Windows NT 4 Active Directory solution, including Backup Domain Controllers (BDC) at each site and replication of the domain database. Provided day-to-day maintenance, change management, and full configuration support to remote sites, including backup strategy to robotic libraries.

**National Server Engineer:** *Installation of shared drive array between two Compaq servers – 1995* – Working with the vender (Compaq), we were able to setup a solution for redundancy in case of server loss at the main site. This was a proprietary technology by Compaq at the time. This was redundancy like VMWare but with real servers with iSCSI

**National Sales Engineer:** *Worked with sales team to provide customers with detailed solutions – 1994 through 1997* – Provided solutions that our company was able to deliver. Provided the sales team with the understanding of the ever-changing technology landscape through customer presentations and documentation. This closed many deals that would not be possible without a better understanding of the technology.



**Technical Sales and Support** - December 1990 to October 1994 - Professional Help Desk support to corporate customers and internal staff. Supported the needs of the accounting, sales, warehouse, HR, and management staffs.

**Assignments included:**

**IT Staffer: Inventory Automation – 1993** – Assisted in automating warehouse inventory management with integration of Symbol bar code readers directly into inventory accounting system. This system tied into the entire accounting system for support of Just In Time, FIFO and LIFO inventory management.

**IT Staffer: Rental Program Assistance – 1992** – Helped manage and setup rental programs for large corporate customers, technology shows, and high-tech educational classrooms. At the time, this was very innovative and generated recurring revenue for the company.

**Marketing: Marketing group assistant – 1991** – Used desktop publishing skills to support marketing and sales departments. Acted as the Technical Consultant for the sales staff and went on sales calls to provide a technical resource to both the customer and the salesperson.

**Field Upgrade Engineer: Internal Software and Hardware upgrade – 1990** – Went to all six remote sites to do Hard Disk, RAM, and OS upgrade on all field systems within the company.



**Long Beach Navy Exchange, Long Beach, CA:** Established in 1946 to provide its customers quality goods and services at a savings and to support Quality of Life programs. The retail stores and many services offered by Navy Exchange Service Command makes it an important quality of life benefit to its current & former Navy customers. Site closed in 1994 due to budget cuts.

**Technical Sales and Support – October 1986 to November 1990** – Provided military personnel with computer hardware and software for home and when on deployment. Provided basic troubleshooting to the client as well sales options with different forms of credit choices.

**Marketing: Vendor representative – 1989** – I was directed by the primary vendor at the time (Apple Computer) to run sales incentives programs that helped increase sales. Provided further incentives to customers to purchase warranty plans (AppleCare) that added to the profitability of each sale.

**Inventory Management:** Responsible for the management of all inventories for the computer electronics department, including demo and returned products and managing the logistics of returning items back to the vendor and distribution centers.

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**Skills** (This section is designed for better Search results – I have worked with all technology listed at different levels)

- Cisco Reseller
  - Dealing with Clients, Vendors and Staff for a Reseller/Integrator
  - Understanding the sales cycle and meeting customers' needs to expand business opportunities
  - Working with Vendors for Configurations (BoM) Licensing
- Project Management skills:
  - Ability to independently study, analyze, map and document a given enterprise network / communication infrastructure for the purposes of defining the scope of operations, maintenance requirements, upgrade issues, and future expansion capacity.
  - Ability to analyze and optimize key business application data path in terms of major network end-to-end traffic flows including identifying and discovering machine/server hardware performance, topology flaws, network bottlenecks, and legacy technology limitations.
  - Ability to understand customer business needs and customer technical requirements while providing consulting services on a case-by-case basis.
  - Special case project deployments such as enterprise-wide IP address migrations i.e. private Class A (10 network 10.X.X.X) address assignments and protocol migration to support Classless Inter-Domain Routing (CIDR) & Variable Length Subnet Masking (VLSM). This also includes the 128.X.X.X, 172.16.X.X & 192.168.X.X Private Networks
- Network Management & Capacity Assessment skills:
  - Wireshark used to gage existing LAN/WAN traffic. Other tools used included Multi Router Traffic Grapher (MRTG), Wild Packets, Wireshark, SolarWinds Engineering tool kits & Orion Console
  - VISIO for documentation

- Design Installation and Configuration:
  - Layer 1
    - Leading to redundant Backbone & Distribution Patch Panel Locations & Positions.
    - Category 5, 5e, 6 and 7 copper solutions and design
    - Single-mode and Multi-mode Fiber
    - Troubleshooting T1 data & voice line troubleshooting and deployments
    - Support for LAN, MAN, WAN and Cable deployments for high-speed networks
  - Layer 2
    - Cisco Catalyst 19xx, 29xx, 4xxx, 55xx and 65xx Series Switches Maintenance – upgrade – replacement – and operations.
    - Single and Dual Supervisor III/IV/7 setup, Root Bridge/Load Balancing, Port Fast, Uplink Fast, Backbone Fast STP deployments
    - Cisco VLAN Pruning (VTP), Port Security, QoS per port and VLAN support
    - ISL & 802.q trunks, Fast & Gigabit Ether Channels or Bundles over Cat5, 5e, 6 & 7 Cables or MMF optics.
    - Wireless deployments for support of QoS based VoIP and Video solutions
    - HSRP - Hot Standby Router Protocol and VRRP - Virtual Router Redundancy Protocol
  - Layer 3 / 4
    - Access Layer Design & Deployment with Cisco Routers 2900/3500/3700 Series
    - Distribution Layer Design & Deployment of Catalyst 35xx/4xxx/45xx/65xx
    - Multilayer Switch Design & Deployment Catalyst 65xx (Hybrid & Native IOS) modes not Nexus.
    - Cisco PIX Firewall 515, 520 & 525 and ASA configuration including NAT features & DMZ design & validation. PIX and ASA Fail-Over Feature setup.
- Security Hardware & Software: (Installation & Setup)
  - Various Industry Standard Authentication System Implementations including Cisco ASA, PIX, RADIUS and TACACS+
  - Cisco PIX and ASA Firewall deployments including EZVPN in a Client/Server operation
- Wireless Networks
  - Setup of Autonomous APs and Controller based
    - Security Layer 2
      - WPA (With and without MAC Filtering) & WPA2 (With and without MAC Filtering)
        - AES, TKIP & PSK
      - 802.1x (With and without MAC Filtering)
      - WEP Static (With and without MAC Filtering)
      - CKIP (With and without MAC Filtering)
    - Security Layer 3
      - AAA
    - QoS – Voice – Video – Best Effort
  - Setup of Lightweight APs to Wireless controller
    - Security Layer 2
      - WPA (With and without MAC Filtering) & WPA2 (With and without MAC Filtering)
        - AES & TKIP
      - 802.1x (With and without MAC Filtering)
      - WEP Static (With and without MAC Filtering)
      - CKIP (With and without MAC Filtering)
    - Security Layer 3
      - AAA
    - QoS – Voice – Video – Best Effort
- Cisco IP Voice & AVVID
  - Voice over & VOIP Design & Deployment:
    - IP Voice Hardware and Licensing:
      - Cisco Call Manager release 4.x/5.x/6.x/7.x/8.x/9.x BE & Enterprise Cisco servers
      - Cisco Call Manager Express release 4.x/5.x/6.x/7.x/8.x/9.x on the Cisco routers
      - 1800/2600/2800/2900/3800/3900/FXS/FXO/Multi-Flex VWICx-2MFT-T1 Digital Packet Voice Truck Modules
      - Catalyst 3500/4000 inline power Access Gateway
      - Catalyst 6500 8-T1/E1 PSTN digital & 24-FXS analog
    - IP Voice Software Service & Features and Licensing:
      - Dial Plan for VOIP device environments with SRST and PSTN Gateway fallback.
      - Cisco CallManager release 6.x/7.x/8.x/9.x BE with Unity Connection 2.x
      - Call Connector Stand Alone
      - Call Connector Server & Client
      - Call Connector Operator
      - Cisco CallManager release Express with Unity Express 4.x/5.x/6.x/7.x/8.x/9.x
      - Catalyst 28xx: VOIP Gateway, Voice VLAN features & Catalyst 6500

- Cisco IP Phones:
        - 69xx series Phones
        - 79xx series Phones
        - 89xx series Phones
        - 99xx series Phones
        - Analog Stations, Voice Gateway
        - Analog Trunks Gateway
      - Cisco IOS MGCP & SRST Gateways configurations not H.323 Gatekeepers
      - Cisco AVVID Applications such a Unity Voice mail, Automated Attendant
      - Cisco Scripting tools for Automated attendant
      - Cisco VXML Gateway deployment
    - IPCC (Cisco Unified Contact Center Express) UCCX Installation – Hardware & software Infrastructure only - no scripting in a production environment
      - IPCC Models
        - Single Site
        - Multi-Site Centralized Call Processing
        - Multi-Site Distributed Call Processing
      - ICM Installation & documentation only
        - Router Installation & documentation only
        - Logger Installation & documentation only
        - CTI Server and CTI Object Server (CTI OS) Installation & documentation only
        - Administrator Workstation Installation & documentation only
        - Peripheral Gateway (PG) Installation & documentation only
        - Peripheral Interface Manager (PIM) Installation & documentation only
        - Cisco Agent Desktop (CAD) Installation & documentation only
        - CVP Installation & documentation only
        - Call Server Installation & documentation only
        - VXML Server Installation & documentation only
        - VXML Gateway Installation & documentation only
        - Reporting Server Installation & documentation only
        - Operations Server Installation & documentation only
  - Cisco Servers and storage
    - MCS 78XX Server
      - Both HP OEM and IBM OEM systems
      - Hardware upgrade & Firmware upgrade
      - RAID solutions
      - Software Installation with CallManager Enterprise – CallManager BE and Unity
    - UCS – C Class Server 2XX / 4XX
      - Hardware upgrade & Firmware upgrade
      - RAID solutions
      - Software Installation with CallManager Enterprise – CallManager BE and Unity
  - Microsoft Windows Operating Systems and Applications
    - Microsoft Windows Server 2012 - 2010 - 2008 – 2003 – 2000 – NT 4.x – NT 3.51
      - Setup, Licensing, Installation and Documentation
      - Active Directory Domain Installation (DC – BDC)
      - Application Services
        - DNS – DHCP – WINS - IIS (Internet Information Server) Installation & Documentation
        - Certificate Server – File Server – SharePoint Services Installation & Documentation
        - Exchange – IMAP – MAPI – Web Base Email – POP3 – SMTP – Terminal Server – Remote Access – VPN Installation & Documentation
        - Streaming media server – SQL Server 2000 – SQL Server 2005 Installation & Documentation
    - Microsoft Windows Workstation (all versions)
      - Setup, Installation and Documentation
    - Microsoft Windows 8 (limited) Including earlier versions of Windows 7 - Vista – XP – 98 – 95 – DOS 3.3)
      - Setup, Installation and Documentation
    - The entire Suite of Microsoft Office 20xx (Including earlier versions of 2010 - 2007 – 2003 – 2000 – XP)
      - Microsoft Word – Excel – Outlook - Access – FrontPage – PowerPoint – Publisher - Visio
  - VMware Server – vSphere 3.x/4.x/5.x with ESXi Server (Cisco related)

**Training Future:** Looking forward: Cisco CCIE-Voice Lab - CCDP & Cisco Architect Certifications.



## Education Corporate

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- **Cisco Systems Corp. 2001 to Present**

- Cisco Certified IE Voice (Written - CCIE-Voice)
- Cisco Certified Design Engineer (CCDA)
- Cisco Unity Design Engineer (CUDN)
- Certified Network Engineer-Voice (CCNA-Voice)
- Certified Network Engineer (CCNA)
- Cisco SmartCare Engineer
- Cisco Customer Voice Portal (CVP) Boot Camp
- Cisco UC Architecture & Design (UCAD)
- Cisco Certified Specialist
- Cisco SmartCare Engineer
- Implementing Cisco QoS
- Cisco Contact Center Express
- Cisco IP Telephony Design Specialist
- Express Foundation Field Specialist
- Express Foundation Design Specialist
- Cisco Lifecycle Services for Advanced UC
- How to Ensure Your UC Services are Operating - Cisco Live
- CUCM Express & Cisco Unity Express - Cisco Live
- Advanced Dial Plan Design for IP Telephony Networks
- CUCM Express and Cisco Unity Express - Cisco Live
- Maximizing Cisco IP Phone benefits - Cisco Live
- Interconnecting Cisco Network Devices (ICND)
- Building Scalable Cisco Internetworks (BSCI)
- Managing Cisco Network Security (MCNS)
- Introduction to Cisco Router Configuration (ICRC)

- **HP & Compaq Computer 1993 to 2008**

- Master A.S.E. in ProCurve Networking & Convergence
- ASE in ProCurve Networking & Convergence
- HP ProCurve Networking Routing Switch Essentials
- ASE in ProCurve Networking & Mobility
- HP AIS Accredited Integration Specialist
- Compaq A.S.E. Servers & Storage
- Compaq Windows NT & Compaq Hardware
- Compaq ASE Windows NT
- HP Network Administration & Support

- **Mitel Networks 2006 to 2008**

- 3300 ICP rel 6.1 Enterprise
- 3300 ICP rel 6.1 Advanced
- 3300 ICP rel 7.0 I+M Update
- 3300 ICP rel 7.0 UR2 I+M Update
- 3300 ICP rel 7.1 I+M Update
- 3300 ICP Prerequisite Training CCNA
- 3300 ICP Prerequisite Training
- 3300 ICP Your Assistant rel 3.0.8
- SX-200 ICP rel 3 Basic I+M (Level 1)
- NuPoint Messenger rel 10.0 I+M Training
- MPT Sales Course Materials & Test
- Teleworker Solution rel 4.0 I+M Update

- **Microsoft Corp. 1999 to Present**

- MS Certified Systems Engineer (MCSE)
- MS Certified Professional (MCP)
- MS Updating Support Skills for Windows 2K
- MS Windows Server and Workstation Cert
- MS Windows Web Certification (MCSE+I)
- MS SQL Server 6.5 Administration
- MS Windows TCP/IP Certification

- **NCR Corporation 1997 to 2005**

- NCR Contractor of the Year 1998
- NCR Microsoft MCSE Validation
- NCR Microsoft MCP Validation
- NCR Cisco Router Config ICRC Validation

- **Novell Corp. 1998**

- Novell Systems Administration
- Novell Advanced Systems Administration

- **IBM 1985-1998**

- IBM Certified TechConnect Training
- IBM Server Technical Training
- IBM Server Windows NT

- **ComputerLand 1985 to 1995**

- ComputerLand Retail Computer Sales Training

- **Apple Computer Inc. 1985 to 1998**

- Apple Certified Systems Engineer
  - Apple Desktop Communications
  - Apple LAN Literacy Certification
  - Apple Network Administration
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## Education Private

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- Dale Carnegie Course 1986
  - Dale Carnegie Course Sales 1987
  - Acclivus BASE Sales Training 1994
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## Education Public

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- Milliken High School, Graduate, 1984
  - Long Beach City College, 1984-1985
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References, Certifications, Resume, Cover Letter and Projects  
with full descriptions are Available at my Website: [www.greatknight.com/career.htm](http://www.greatknight.com/career.htm)

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