# **Tony Curtis**

tony@1biz.com 720-417-5509

Summary: Over twenty years hands on experience in networking infrastructure technology responsible for consulting, design, implementation, administration, troubleshooting, and management. A highly motivated professional with excellent verbal and written communication skills committed to a high quality of service for all customers. Specialties are architecting and designing complex network systems, process development, network automation, and supporting other engineers in the delivery of services. Big picture thinker able to visualize the process from high level to detailed level through multiple facets of technology.

# **Technical Certifications**

- Cisco Certified Design Professional (CCDP)
- Cisco Certified Network Professional (CCNP)
- Cisco Certified Network Associate (CCNA)
- Cisco Certified Design Associate (CCDA)
- CCIE R&S Written (July 2018 Lab scheduled March 2019)

# Job History

jht	Architect I	Apr 2016 - Present
T Consulting (United Airlines)	Consultant	Jan 2016 – Mar 2016
do	Sr Network Engineer	Oct 2013 – Dec 2015
e Energy	Sr Telecom Network Analyst	July 2010 – Sept 2013
x Systems, Inc.	Technical Analyst/SME	Nov 2007 – Oct 2009
ct Connect	Network Engineer Consultant	March 2007 – Oct 2007
ous, Inc.	Network Engineer	May 2004 – March 2007
pendent Network Consultant	Network Support	March 2002 - May 2004
cal Resources, Inc.	Network Engineer Consultant	Nov 1999 – Mar 2002
ΓSystems	Desktop/Network Consultant	Sept 1998 – Nov 1999
Care	Lead LAN Technician	May 1998 – Sept 1998
	Desktop Support Specialist	Sept 1997 – May 1998
hnet	Phone Support Technician	Mar 1997 – Sept 1997
e Energy x Systems, Inc. ct Connect ous, Inc. pendent Network Consultant cal Resources, Inc. T Systems Care	Sr Telecom Network Analyst Technical Analyst/SME Network Engineer Consultant Network Engineer Network Support Network Engineer Consultant Desktop/Network Consultant Lead LAN Technician Desktop Support Specialist	July 2010 – Sept 2013 Nov 2007 – Oct 2009 March 2007 – Oct 2007 May 2004 – March 2007 March 2002 – May 2004 Nov 1999 – Mar 2002 Sept 1998 – Nov 1999 May 1998 – Sept 1998 Sept 1997 – May 1998

## Insight Architect I

Architect I Charlotte, NC
Responsibilities
Charlotte, NC

Architect assigned to largest energy provider in the US as full-time expert resource to assist with all facets of network operations.

Apr 2016 - Present

- Provided advanced architectural design recommendations for major projects including MPLS core, DMVPN WAN edge, Internet
  redundancy and failover, ACI Fabric, DNA Center (formerly APIC EM), EOL Hardware/Software, and deployment automation.
- Developed training sessions including but not limited to: DMVPN design, MPLS design, Python/VBA scripting, internal processes, and automation deployment applications.
- Developed Proof of Concept labs for validating designs, test cases, and demonstration of new features.
- Mentored engineers on use of IP SLA and EEM scripting to do failure detection, failover, and other automation tasks in multiple scenarios.
- Developed automation scripts to gather data, output configuration and deployment of network gear to increase consistency and reliability while reducing human performance errors.
- Created semi-automated templates for configuration generation that has been used for over 2,000 devices. Templates range from simple layer 2 switches, layer 3 switches, voice gateways, to complex BGP over DMVPN designs.
- Serve as point of escalation for major networking issues. Worked directly between customer and Cisco team to provide resolution to problems identified.
- Lead team of network engineers to complete network assessment of global construction company. Identified, documented, and presented issues to client resulting in statement of work presented to client for remediation.
- Lead team of network engineers to produce network diagrams of >400 client sites. Developed standards and processes.
- Worked with Insight teams to hire resources, respond to RFPs, and direct resources to proper activities.

#### Intrado Inc

### Sr Network Engineer - TechOps

Responsibilities

- Senior member of team of twelve responsible for architecture, engineering, implementation, and maintenance of a complex 911 service provider network with approximately 4000 WAN nodes.
- Provide guidance and support to junior members as needed to ensure success in their projects.
- Create documentation including WIKI troubleshooting guides, process, procedures, and standards for engineers to follow.
- Developed processes and procedures for a wide variety of initiatives but focused heavily on scalable deployment methodologies for new sites and standardization of existing sites.
- Developed hardware, software, documentation, and configuration standards to drive internal processes.
- Participated (mostly managed other engineers) in the successful deployment of >500 remote sites using a variety of technologies. All
  implementations done using DMVPN Phase 1, BGP, IPSLA, MPLS/VRF Lite, and EEM configurations. Variations included customer
  peering, ASYNC tunneling, QoS, switch integration, VRRP, and static routing.
- Worked with team to architect and implement a core MPLS LDP network to replace multiple legacy point to point circuits. Completed
  architecture designs, business cases, POC testing, implementation, training, and support development for the MPLS network. Utilized
  MP-BGP, LDP, and IS-IS for protocol negotiation. Trained junior team members and NOC.
- Daily support duties typically include DMVPN, BGP, MPLS (LDP or MP-BGP), B2B VPN, packet/traffic analysis, and NAT issues. Other
  duties included but not limited to load balancers, firewalls, and LAN switches.
- Configured, tested, and managed templates used for deployments and migrations for all remote sites. One template drove
  approximately 36 different potential configurations based on selection of data within the source Excel spreadsheet. Automation of
  this processes drastically reduced error rate and misconfiguration practically eliminated when processes followed.
- Utilized packet tracing, Netflow, and IP accounting on practically daily basis to directly or assist in resolution of an issue with a junior team member.

#### Accomplishments

- Part of project team responsible for completion of migration from HPOV 7.x to HPOV 9.x. My duties included level setting SNMP configurations, managing the dataset to ensure every device was updated/configured/tested.
- Completed project to migrate approximately 200 remote WAN sites using redundant routers to new service while maintaining service. Developed templates, procedures, and process to successfully migrate all without impacting business operations.
- System refresh of NetScout Inifinstream completed and upgraded to nGenius platform. Integrated many additional features such as application monitoring, VoIP analysis, and TCP session monitoring.

# **Duke Energy**

CCCi Consulting (Duke Energy)

**Telecom Network Engineer – Data Network Design** 

Responsibilities

June 2010 – Sept 2013 June 2010 – July 2012

Oct 2013 – Dec 2015

Longmont, CO

Charlotte, NC

Primary engineer responsible for design and escalation support for the Energy Management System network. Worked closely with
the business to gather requirements, propose architecture changes, implement solution, and provide escalated troubleshooting for
the Operations team

- Technical lead for project designed to introduce Nexus infrastructure to Energy Management Systems networks. Responsible for architectural design, security review, equipment procurement, and lab configuration
- Provide network design and infrastructure upgrade support for multiple vertical business lines including Hydro Power Generation,
   OpenSky Radio network, NERC CIP networks, and core network as needed
- · Consult with business and technical liaisons to determine network requirements and provide network solutions
- Quote, order, configure, and work with field technicians to install network equipment including but not limited to: Routers Cisco Series 7200, 7600, 3900, 3800, 2900, 2800, 1900, 1800, 800; Switches – Catalyst 6500, 3560, 3750, 3750X, 2960; Firewalls – Cisco ASA 5505, 5510, 5520
- Configure various network technologies including Serial T1, Serial T3, Fast/Gig/10G Ethernet, Etherchannel, Virtual Port Channel, VLAN, QoS, Checkpoint SecurePlatform, Checkpoint IPSO, Checkpoint UTM, Cisco AnyConnect client, Cisco Wireless LAN Controller, Cisco Wireless Control System, Aironet 1100 1300 LWAPP, Aironet Wireless Bridges, and TACACS 4.x 5.x
- Telecom technical subject matter expert for telecom NERC CIP compliance program
- · Created multiple 'Big Picture' type diagrams to illustrate end-to-end connectivity for Energy Management Systems
- Member of compliance team responsible with creating and updating procedural documents and Visio diagrams used to ensure adherence to NERC CIP standards
- Review vulnerability assessment reports that documented results from ports scans, services, and configuration reviews of network devices. Provided business justification for the results or create action plans and manage implementation of fixes
- Mentor for other Data Network personnel to provide escalation support for technical issues
- Respond to Service Disruption Events as needed
- Utilize network analytical tools including Wireshark, Network Instruments Observer, Gigastore Probe, Solarwinds Engineers Edition, Solarwinds Orion, NetQoS, Netflow Analyzer, NMAP, HTTPWatch, and Firemon
- Create and update existing network diagrams based on infrastructure adds, moves, or changes using Microsoft Visio
- Create training modules to share information with peer groups and inform them of changes in design, new network areas, or compliance program updates
- Recreated Disaster Recovery documentation to be thorough and implement new hardware types. Created and maintained procedural documentation, checklist, and network diagrams to illustrate new hardware layout.

### Apex Systems Inc (Wachovia CIB)

### **Project Manager/SME – WISD Platform Solutions**

Responsibilities

bilities

Technical SME on a variety of initiatives within Wholesale & International Service Delivery providing expertise and direction on a

Nov 2007 - Oct 2009

Charlotte, NC

- variety of projects for the Infrastructure Platform Solutions group.
   Developed and maintained business requirements documentation including vendor comparisons, technical design, statement of work, project plans, management 4-boxes, status reports, line of business requirements, management presentations, testing requirements, and use case scenarios.
- Managed large data sets through Microsoft Excel to produce accurate representations of the environment.
- Built strong relationships between technical engineers and business representatives to gather requirements and ensure all stakeholders are aware of progression of projects.
- Partnered with domestic and international support managers to gain their involvement, support, and resource commitments for the projects within WISD.
- Ensuring monthly patch management procedures and policies were followed and implemented new requirements.
- Project Manager for third-party Systems Management application; task included vendor selection, defining project budget, supporting team to define comprehensive infrastructure requirement, and development of PMO required project documentation.
- Conducted technical interviews and providing recommendations for positions within the organization including engineers, project managers, coordinators, analysts, desktop technicians and testers.

#### Accomplishments

- Managed major project Office 2003 SP3 upgrade to over 16,000 international workstations at over an 80% cost reduction from original project estimates due to deployment of Application Virtualization (App-V)
- Worked with engineers to deploy Microsoft App-V to support various applications including compatible Office 2003 versions
- Managed implementation of highly available RightFax 9.x implementation by working closely with server engineering, network services, and voice services to deliver a scalable application infrastructure.
- Worked with desktop team to implement more cohesive patch management strategy to include geographical distribution of packages, automated delivery to desktops, and patch download filtering.
- Completed implementation of redundant and scalable WSUS for CIB workstations to deliver automated Microsoft patches.

# **Technical Expertise**

Networking Topologies	◆ Fast/Gig/10G/40G Ethernet ◆ MPLS L3 VPN ◆ WLAN 802.11 a/b/g ◆ site-to-site IPSec VPN ◆ Dialup VPN ◆ Frame Relay ◆ FDDI ◆ X.25 ◆ PPP ◆ HDLC ◆ SDLC ◆ ATM ◆ Serial (T1/T3) ◆ Cellular 3G/4G ◆ Metro Ethernet ◆
Networking Protocols	◆ TCP/UDP ◆ IPv4 ◆ IPv6 ◆ OSPFv2/OSPFv3 ◆ EIGRP/EIGRPv6 ◆ BGP/MP-BGP ◆ IS-IS ◆ RIP(ng) ◆ IGMP ◆ CGMP ◆ PIM ◆ CDP ◆ LLDP ◆ STP ◆ VTP ◆ EtherChannel (LACP and PAGP) ◆ HSRP/VRRP/GLBP ◆ SIP ◆ MGCP ◆ RTP ◆ PPPoE ◆ GRE ◆ VTI ◆ MPLS (LDP)
Networking Technologies	Client VPN (IPSec, PPTP, and L2TP) ◆ SNMP ◆ FTP ◆ TFTP ◆ DNS ◆ DHCP ◆ DUN ◆ RRAS     ACL ◆ Router/Switch Hardening & Security ◆ Route Redistribution ◆ QoS ◆ 6to4 Tunnel ◆     NAT/PAT ◆ VoIP ◆ PoE ◆ VACL ◆ AAA ◆ Policy Routing ◆ NBAR ◆ T1/T3 ◆ ISDN BRI ◆ ISDN     PRI ◆ IP SLA ◆ EEM ◆
Operating Systems	◆ Cisco IOS 12.x, 15.x ◆ Cisco NX OS ◆ Microsoft Windows 2000, 2003 Server ◆ Windows 7, XP ◆ Microsoft Windows NT 4.0, 3.5 ◆ Windows ME, 98, 95, 3.x ◆ Novell Netware 3.x, 4.x, 5.x ◆ Free BSD ◆ LINUX ◆
Software	CiscoWorks ◆ HP Openview 9.x, 8.x, 7.x, 6.x ◆ Cisco Secure ACS (TACACS+) ◆ MRTG ◆ Intel LANDesk ◆ Compaq Insight Manager ◆ Cisco IPS ◆ SNORT ◆ Netsys Baseliner ◆ Visio ◆ Exchange 5.5 and 2000 ◆ Computer Associates ARCServe ◆ Seagate Backup Exec ◆ Norton Corporate Antivirus ◆ ORION Network Manager ◆ Ethereal/Wireshark ◆ Network Instruments Observer ◆ NMAP ◆ NNMi ◆ Wireshark ◆
Network Hardware	◆ Cisco routers ◆ Cisco Switches ◆ Cisco Nexus ◆ ACI Fabric ◆ APIC-EM ◆ SD-Access ◆ SD-WAN ◆ Cisco Wireless LAN Controllers ◆ Cisco AP ◆ Cisco ASA ◆ Cisco ISE ◆ Netscreen Firewall ◆ Various modular interfaces including WIC/VWIC/VIC, SM, and NM ◆