



Career Highlights:

- Currently, working as Solution Architect and Networks SME for **IBM/Kyndryl Canada** for customers on Cisco and VMware (vSphere and NSX) infrastructure upgrade and migration including **CUCA, University of Toronto, University of Ottawa and Bombardier**.
- Worked for Virginia Information Technology Agencies (**VITA USA; MTO Transformation Project in Verizon Wireless** for over **1400 customer sites**. Plan, design and investigate communications networks and complete implementation and delivery of customer sites under Project Scope of Work (SoW) with routing configurations, hardware and IOS upgrade.
- Proven record as **Project Delivery Team Leader** for **Canadian Health Care System** High Availability Designs (HA), **HA up to 99.999%**: Technical Pre-Sales, High-Level (**HLD**) and Low-Level Design (**LLD**) Architecture, Implementation and Deployment. Integration **Building Automation System** Design of Multiple Vendors to one single Platform.
- Successfully completed High Availability Design Project for **Peel Memorial Centre (PMC) Hospital Brampton** having volume of **75 million Dollars with 5600 drop counts**. Conducted Phase wise: Pre-Sales, High-Level and Low-Level Design Architecture, Demo Presentation, Implementation and Deployment with UAT.
- Excellent **communication skills** with proven ability to collaborate effectively with members of multidisciplinary **teams, managers, clients and stakeholders**.
- Proven record as **Team Leader** and Subject Matter Expert (**SME**) in **Network System Design and Implementation, Installation and Troubleshoot** for high profile and quality sensitive customers **Saudi Arabian National Guards SANGCOM, SANG IT and U.K. MoD**.
- Successful track record of leading and managing **Managed Services Operations for 12 years**.
- Served as **Technical Project Leader** for country wide **Regional Command Centers (RCC) Communication Systems** for multiple projects those were integrated and interdisciplinary in nature with respect to technical, vendor and support aspects.
- Demonstrated ability to motivate, support and provide **On-Job-Training for technical and non-technical staff** and maintain test benches for project demonstrations and to find technical solutions for project related issues.
- Proven track record of keeping teams focused and delivering success in rapidly evolving and dynamic environments.
- Managed **Third Party Sub-Contractors** and **collaborated** with different **project groups** to provide support to resolve technical issues to ensure the operations are running smoothly.

Certification:

- **Project Management Professional (PMP) # 2801706**
- Amazon Web Services **Solution Architect (AWS-SAA)**
- **CCIE R&S#29515**
- **CCDP: Cisco Design Professional**
- **Certified** DC Architecture Systems Eng. Rep.
- **Certified** Cisco Unified Computing and Fabric Eng. Rep.
- CCNP Routing and Switching
- CCNA Security
- CCNA Wireless
- VMware VCP Data center 6.0
- VMware VCP Network Virtualization 6.0
- VMware VCA vSphere 6.0 Foundation
- Palo Alto Accredited Config Eng. (ACE) - PAN-OS 8.1
- ITIL Foundation v3
- MCSE

Skills:

- **Cisco Wireless Controller/ APs:** Cisco WLC 5508, 5520/1600i-K9
- **Cisco Router Platforms:** Catalyst: 4321, 2500, 2600, 2800, 3800, 7200 Series.
- **Cisco Switch Platforms:** ASR 9001 IOS-XR | Catalyst: 2900, 4948, 3500, 3560, 3750, 4500, 6500, 6800 Series IOS.
- **Cisco Nexus:** Cisco NX9372, Cisco NX 7700 series switch, NX-5672UP, Cisco NX-2248TP GE | NX-OS
- **Dell Network:** S4048-ON (Core), N3024-ON (ISP Switth), Dell MXL Blade Switch M1000E,
- **Cisco Firewall:** ASA 5505-X, ASA5506-X, ASA 5512-X, ASA 5585-X
- **Fortinet Firewall:** Fortinet 1200D, Forti Sandbox 1000D
- **Routing Protocols:** **OSPF, EIGRP, RIP, BGP, HSRP, GLBP, TCP/IP Protocol, MPLS-VPN, PBR, Address-Families.**
- **Switching Protocols:** VTP, STP, VLANs, 802.1q trunking and Inter VLAN Routing, 802.3ad link Aggregation (PAgP and LACP), QoS, Layer 2 protocol tunneling.
- **VLSM/ACL:** CIDR, IP Addressing and Subnet Schemes, IP Access Lists, Prefix-Lists, Redistribution.

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- **IoT:** Hospital Bedside Terminals, Kiosks, Room Side Monitors, Elevators, RTLS, ESB, DAS, Unified Communications, Pneumatic Tubes, Nurse Call, Linen and Waste Tube, AGV, Water Treatment Systems, Med Gas, Mechanical ECMS, Lighting Control, Electrical ECMS, Dynamic Glass, Clocks, Boilers, CCTV, Intercom, Access Control, Fire and Active Directory.
- **Security:** IPSEC, SSL, TLS, NAT, PAT, VPN, IDS/IPS, Site to Site, Remote VPN, Sandbox, Cisco AnyConnect VPN.
- **Virtualization:** Design virtualized On-Prem and Cloud based VMware infrastructure, Install, Configure and Deployed **VMware ESXi 6.5/6.7/7.0U3** hosts and **VCSA 6.5/6.7/7.0U3** and **NSX-V 6.4.6/6.4.14** and **NSX-T 3.2.0** Overlay networking. Customer's IaaS on IBM Cloud Infrastructure upgrade of vSphere Environment and migration of **NSX-V to T** plus work load migration through **HCX Lift and Shift In-Parallel** method.
- **Microsoft Systems:** Install, Configure and Manage Active Directory, OU, Security Groups and users on Windows Enterprise Server Win Server 2016 Std/DC, 2012 R2 Std/DC, 2008/2003/2000, Exchange 2000/2003. Update patches on servers.
- **System Security:** McAfee E-Policy Orchestrator, Files and Folders Encryption, End-Point Encryption, McAfee Agents/Anti-Virus, Symantec Norton AV, E-Thales Encryption.
- **Backup and Disaster Recovery:** Symantec Backup Exec, VERITAS Netback up, Ghost Imaging Software, Acronis True Image.
- **Migration:** IP Networks, Domain, AD and Exchange Servers Infrastructure and Clients with hardware upgrades.
- **UNIX System:** **HP UX 10.2/11**, Sun Solaris 8, Linux RedHat, **EMOS**, Service On Optical (**SOO**), Service On Access (**SoA**)
- **Help Desk:** Service Now, Manage Engine, Remedy Helpdesk, Lotus Notes.
- **Monitoring/Management Tools:** Ops-Ramp, ServiceNow, WhatsUp Gold, Cisco Network Assistant, Dude3d, Solar winds Network Management, Crypto, Selex.

Professional Experience:

Senior Network Architect | SME Engineer

IBM/Kyndryl Canada, Markham, Ontario Canada:

May 2021 – Current

Project: Credit Union Central Alberta (CUCA)

I am working as network architect/SME, a dedicated network resource from IBM/Kyndryl for **Credit Union Central Alberta (CUCA)**. I also work with other customers of IBM/Kyndryl on project basis. The main customers, I worked with, are Canadian Government organizations, University of Toronto, University of Ottawa and Bombardier.

- Serving as a **lead technical member** on customer engagements, analyze customer requirements and provide **cost effective** network solutions to provide business continuity and for new projects.
- Provide **High-level (HLD)** and **Low Level (LLD)** architectural design, conduct existing infrastructure study and create feasibility for architectural decisions.
- Currently, performing the **NSX-V to NSX-T in parallel lift and Shift migration** on CUCA Account for Toronto and Montreal IBM Cloud Datacenters from Sky-lake servers to Cascade-Lake Server.
- Working as the **Lead Hands-on SME** resource for NSX V to T migration for CUCA Account migration Project.
- Conducted **Proof-of-Concept (PoC)** and analyze the requirements, escalate to resolve issues with vendor's technical support teams, provide detailed results to minimize the obstacles during real-time implementation of solutions for networks and security projects.
- Create, consult and validate the Bill of Material (BoM) in detail and to ensure the solutions **were understood and agreed, reference to PSOs** defined standards and provide comparative **cost-effective analysis** from multiple vendors.
- Provide network documentation such as solution design document, record of change, and network diagrams.
- Provide technical training and support for appropriate teams.
- Provide incident support for customers and troubleshoot architecture as issues arise and conduct root cause analysis.
- Plan, schedule and execute the **Site Disaster Recovery** Exercise for Primary Site Fail-over and Fail-back of CUCA to test the readiness of the DR infrastructure.

Senior Network Consulting Engineer

Verizon Wireless, Richmond-Virginia, USA:

July 2019 – May 2021

Project: Virginia Information Technology Agencies (VITA) USA; MTO Transformation

Successfully completed upgrade and migration of Virginia State Department **MTO Transformation project** for over **1400 sites** at **Verizon Wireless**.

- Worked on continuous improvement efforts that drive Verizon's business work with customer technical teams to provide solutions for customers' internetworking communications requirements.
- Perform routed/switched network design activity for large enterprise customer data networks.
- Plan, design and investigate communications networks and complete implementation and delivery of sites under Project Scope of Work (SoW).
- Partnering with customer teams to develop solutions that support their requirements.
- Prepare network schematics to define and illustrate network design solutions.
- Create hardware and software configuration upgrades.
- Providing IP addressing and routing strategies.

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- Preparing detailed work orders for technicians.
- Responsible for day-to-day administration, disaster recovery, network design and project management.
- Application support, integration, network administration, desktop troubleshooting, hardware/software installation, and asset/license management.
- Author functional specification and work with other engineers to provide guidance in creating functional specifications.
- Participate and lead brainstorming discussions to arrive at optimal designs.
- Work with architects and leads in other functional areas of the engineering team to cooperate on the complete system design and influence design decisions.

Solution Engineer Converged Networks and Security

TeraMach Technologies, Markham-Ontario. Canada:

Aug 2018 – July 2019

TeraMach has worked with organizations across Canada to implement proven, scalable, technology solutions. TeraMach's IT experts and experienced consultants work closely with customers and provide customized technical solutions to ensure IT transformation agenda is a success.

Project: Financial Services Commission of Ontario (FSCO):

- Provided data center migration strategies, designs and testing of proposed solutions
- Reviewing security policies on existing firewalls and designing security components for new data center
- Backbone network conversion and integration with OSPF, BGP, VPNs
- Building secure connections to bank vendors using encryption over dedicated MPLS links.
- Engage vendors to discuss technical features and best practices.
- Design and implement infrastructures with **AWS Cloud** and VMware NSX, ESXi, High Availability Firewalls and Load Balancers.
- Design and Implement multiple HA Cluster Hyper-V Host for **Production, DevOps and Backup domains. Hyper-V Environment Design and Deployment** – Full Configuration and Management through **SCVMM**.
- Working with **multiple teams and vendors** and coordinating **migration scheduling and activities**.
- Interface with vendors with complex technical designs for staging, **pre-cutover**, implementation and **cut-over**.
- Create and deploy **Bubble Testing** network environment, a duplicate for real time network, before Live Migration for Application Testing for 1500+ servers in **isolated** environment.
- Schedule and **Migrate Group of Virtual Server** from Head office to New Data Center.
- User Acceptance Testing (**UAT**) and Support throughout the course of the **migration task**.

Solution Architect | Converge Network and Systems

Plan Group, Toronto-Ontario. Canada.

May 2015 – Jun 2018

Plan Group is Canada's most innovative technical services provider since 1955, in the areas of Electrical, Mechanical and **ICAT (Information, Communications & Automation Technologies)**. Plan Group has been transforming its customers' ideas into reality. With offices in Toronto, Ottawa, Montreal and Vancouver, Plan Group employs one of the largest groups of technical trades people in Canada.

Responsibilities:

I had been serving as Senior Solution Architect for Large Scale Business and Health Care Systems. As Project Delivery Lead, my responsibilities were to:

- To respond on the **technical aspects** of RFPs, from the clients, throughout the course of business and conduct meetings with clients and stakeholders to understand and gather the requirements.
- Provide clear understanding of **design aspects and its phases** to the clients and stakeholders through live presentations and white boarding.
- Consult and explain the Bill of Material (BoM) in detail and to ensure the solutions **were understood and agreed, reference to PSoS defined standards/requirements**.
- Take the lead role on designing the architecture of converge network systems and provide solution for integration with multi-vendor equipment and existing network.
- Translate **Project Scope of Services (PSoS)** requirements into detailed architectures, **High Level (HLD)** and **Low-Level Design (LLD)** and validate the designs against Bill of Materials (BoM).
- Document all technical diagrams/schematics, Port mapping, Port Assignments, IP Schemes, Equipment Configurations and validate to reflect accurately against the real time environment at Data Centers and Main Communication Rooms (MCR).
- Provide remote access to agreed sub-contractors, to utilise PG Facilities Network Area, to ensure the **on-time delivery of projects to customers**.
- To conduct the **Pre-Site, Install Testing and Commissioning Demo** to customer's technical teams on ordered Hardware and conduct **Post-Site Install validation/reporting** for final sign-off reference to PSoS.
- Mentor and support internal Deployment teams for **On-Site implementation, configurations and deployment**.

Projects:

I lead the following projects those were **High Availability Multi-Tier Network Design** in nature. The design architecture was based on Core, Distribution, Security, Wireless, Voice, Data Centre, Network Monitoring and Access Layer.

- **Peel Memorial Centre (PMC) Health Care System: 5600 Drop Count.**
- **Milton District Hospital (MDH): 11000 Drop Count.**
- **Bridge Point Hospital (BPH) Toronto, Health Care System: 5000 Drop Count.**
- Managed Services Operations and SME Support for **Equitable Bank Data Centers (L3 Support Engineer):** Direct, plan and organize all aspects of the Equitable Bank **Network Management LAN/WAN** Infrastructure across **multiple Data centers.**
- **Equitable Bank Data Center Migration:** Planning, Design, Management, and Deployment.
- Dynamic Funds Tower MMM Group Project (**IoT**): Building Automation System (BAS) and Security Surveillance System.
- Oxford Properties Project: 100 Adelaide Street West Tower (**IoT**): BAS and Security Surveillance System.
- Dream Office Management Corp. Project (**IoT**): BAS and Security Surveillance System.

Subject Matter Expert (SME) Communication Network

Aug 2006 - Mar 2015

Airbus Group Paradigm-GPT, Riyadh Saudi Arabia

Airbus Group SE is a European multinational aerospace and defense corporation. Seated in Toulouse, France, the group consists of the three business divisions **Airbus, Airbus Defense and Space and Airbus Helicopters.** **Paradigm-GPT** is subsidiary of **Airbus Group SE in Saudi Arabia.**

Responsibilities:

I had been serving as Nation Wide Network and System Manager for **Airbus Group SE.** For **Paradigm-GPT Corporate-IT,** I had been serving as Network System and Server Support for country wide Communication Network.

- Direct, plan and organize all aspects of the customer **Network Management LAN/WAN** Infrastructure within the **Operational System & Support (OSS)** and **Communication Centre (COMM-CEN)** Areas to ensure the computing capabilities are responsive to the needs of the company's growth & objectives.
- Being member of **Technical Assistance Committee (TAC3),** successfully served as **SME for Network and Systems,** for Saudi Arabian National Guard (**SANGCOM**) **3xRegional Command Centre (RCC) Riyadh(CR), Jeddah(WR) and Dammam(ER),** providing technical solutions and support for communication networks design, implementation and deployment.
- Delivered cost-effective solutions and support as **IS Officer** to **Managed Services and Corporate IT** that result in **targeting 99.999%** systems availability with agreed SLA's.
- Lead the IT Infrastructure team providing **leadership and strategic** direction to ensure the **availability and reliability** of key **systems and services** to the business.
- Maintained High Quality of **consultancy and recommendations** to customer to **minimize the network outages.**
- Successfully lead the monitoring & operational readiness of **Customer and Corporate-IT Disaster Recovery Plan.**
- Accountable for managing Corporate Network, Servers and Client requirements and successfully provided the transformation of the **infrastructure and services** available to end users.
- Lead efforts that cover technical aspects of Network capacity planning, contingency planning, change management, configuration managements and infrastructure upgrade and migrations to reflect the synchronization with current IT technology standards.
- **Designed and maintained** multiple **test benches** to **support Managed Services** for demonstrations on pilot projects before delivery.
- Maintained **High and Low-Level Network Diagrams** and **information documents** that reflected the **100% accuracy** of the **physical layout and schematics** of communication networks and systems.
- Responsible for **asset management, network & desktop** support operations.
- **Liaison** with **SANG and UK-MoD personnel** as required by **ONM Operations Director and Corporate Directors.**

RCC System:

Lead Support, as **TAC member and SME,** for following **3x RCCs/SANG-IT** systems:

- Command and Control Information System (**CCIS**): Installation deployment and SME support for Networks and Systems for 3x RCCs and Remote Sites.
- Digital Microwave Radio System (**DMRS**): Installation, deployment, disaster recovery and backups for Ericsson IMA and NERA **Application Server and Active Directory Server/ RCC Clients** and integration with **DMRS network.**
- Secured Mobile Radio System (**SMR**): Worked with 3rd party Motorola team for the installation and deployment of SMR System in Regional Command Centre.
- **Remedy Help Desk and Cable Management System** installation and Deployment: Sun Solaris 8, Data Storage Network, Oracle DB 9 [**Sun fire V880/280R StorEdge D-1000, High Availability Cluster**]
- Element Management Operating System (**EMOS**): **HP-UX 11 [HP Visualize J5000, B2000]**
- Service on Optical (**SoO**) and Service on Access (**SoA**); integrated and deployed SoO and SoA system for CMUX and SDH network on main fiber core link. **HP-UX 11**

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- **E-Thales Crypto (Encryption)** devices installation, testing and management through **Data Cryptor DC2K**.
- **UPS Management System Liebert**.
- **3x RCC Communication Network IOS backups and remote support for unmanned sites**.
- **NGSS Training system, a replica of live RCC system:** Installation, deployment, disaster recovery and backups.
- **Multi-Functional Gateway (MFG): HP-UX 10.20 and IP Switch based X.400 Military Platform**.

Education:

- **M.Sc.** in Communication and Media Engineering University of Applied Sciences Offenburg. **Germany 2004**
- **B.S in Electronics Engineering. 2001.**

Courses:

- CISSP Course Completed
- Linux Red-Hat Administration
- Sun Solaris Networking Essentials
- Sun Solaris Administration
- C-Voice and IP Telephony

Language:

English, Arabic, German.

Citizenship: Canadian