Brian S. Knowles

Objective: To further enhance my career by expanding my roles and responsibilities in Information Technology specializing in Network Technologies.

Experience

2008 to present

The Board of Public Utilities (BPU) – Wyandotte Co. KS   *Network Operations Analyst*

- Serve as the Fiber Optic Subject Matter Expert in two North American Reliability Council (NERC) audits on the redundant design of the BPU Metropolitan Area Network (MAN).

- I led a site survey of the sites deemed critical by the NERC audit team in order to prove compliance regarding the testimony I provided during the verbal audit.

- Currently serve as 1 of 9 NERC Cyber Security Incident Reporting and Response Team (CSIRT) first responders for the BPU.

- Currently oversee the design, construction and maintenance of the redundant high-speed fiber optic MAN, as well as the high-speed wireless mesh network for the BPU.

- Work directly with the BPU's Information Technology (IT) departments network tech's, server tech's, desktop tech's, DBA's, security tech's, programmers.

- Work directly with BPU's critical areas such as the Power Plant Distributed Control Systems, Electric Control Center's Supervisory Control and Date Acquisition, Water Processing, Water Distribution, Electric Distribution, and Traffic Signal.

- Work directly with entities outside of BPU such as the Unified Government (UG) of Wyandotte County, Kansas City Fire Department, Kansas City Police Department, Kansas Department of Transportation, UG Emergency Management System, Operation Green Light, and Mid-America Regional Council.

The Board of Public Utilities – Wyandotte Co. KS   *Associate of Electrical Engineering*

- Technical Project Lead on constructing and implementing a wireless mesh network infrastructure that the BPU currently uses for Automated Metering Infrastructure as well as other critical and non-critical functions in the future.

- Project Lead working with Google to identify dark fiber for the Google Fiber Optic to the Home project.

- Project Lead working with Google to identify locations at BPU substations suitable for Google Huts.

- Assisted in the design, construction and maintenance of the redundant high-speed fiber optic MAN for the BPU in order to ensure the highest integrity of the system.

2001 to 2008

Results Technology Incorporated – Lenexa, KS *Senior Systems Engineer*

- Solely or jointly, assisted in implementing, supporting, and troubleshooting a variety of systems such as Novell and Microsoft Network Operating Systems, Microsoft Desktop Operating Systems, Packateer's Packetshaper Bandwidth Management systems, switches, routers, firewalls, wireless Access Points, and Network Analyzer's from various vendors.

- At the Board of Public Utilities, I assisted in the design, implementation, and support of the Extreme Network infrastructure including Desktop Support, Server / Network Operating System, and Switch/Router Infrastructure.

- Worked with the BPU Electrical Engineering department on design, implementation, and support of the critical networks such as SCADA, DCS, Substation, and BPU Water departments data communications between the Water Operations Foxboro systems.

- At the Board of Public Utilities my duties were to configure, implement and support a new, high speed Gigabit, redundant Fiber Optic MAN designed by Electrical Engineering.

1998 to 2001

General Electric / Information Technologies Solutions – Kansas City, MO *Systems Engineer*

- While a contractor at Sprint, Project Managed a Year 2000 (Y2K) project in which approximately 30,000 desktop computers' BIOS and system files were scanned for Y2K compliancy in just over 3 months.

- While a contractor at Sprint, wrote engineering specifications to build Data Centers in new call centers being built throughout the United States.

- Conducted numerous walkthroughs and wireless site surveys of businesses who were considering purchasing Wireless Local Area Network capabilities.

1993 to 1998

American Freightways - Harrison, AR

PC Support Supervisor

- Manage and assist in the administration of 28 Win NT Backup Domain Controller's, 1 Win NT Primary Domain Controller, 1 Win NT Systems Management Server, 1 Win NT Exchange Server and 3 Win NT File Servers.

- Managed and assisted in the administration of a Banyan Vines Network Operating System (NOS) with 180 Banyan 5.x - 7.x File/Print servers with 1600+ clients, 164 of which were remote Local Area Networks (LAN) throughout the United States.

- Research and Development/Implementation of all aspects of Network equipment.

- Manage a team of 12 technicians that currently support a network of 206 LAN's containing 5000+ computer components.

- Personally installed 45 remote LAN's from the ground up. This entailed the configuration and installation of all Channel Service Unit/Data Service Unit's, Bridges/Routers, File/Print Servers, Backbone Equipment, Personal Computer's (PC), Printers, Scanners, Communication Media and Login Profiles/Scripts.

- Install and support all aspects of PC hardware devices and peripherals.

- Install and support all aspects of PC software applications, Operating System's (OS) and NOS's.

- Played a key roll in 3 major company wide computer conversions. The first 2 involved 8 tech's swapping 1600 and 1800+ computers at 164 and 190 sights respectively. The 3rd is in progress now where 2500+ PC's are being swapped out in a 3-month period. Each of these conversion's entailed new NOS's and OS's at both the PC and Server level.

- Proficient in Project Managing the implementation of computer systems in many areas of the Information Technologies organization.

Education

2014 - 2019

Donnelly College - Kansas City, KS

Associates Degree in Science - Information Technology

Phi Theta Kappa – Honor Society

2008 - Present

The Board of Public Utilities – Kansas City, KS

Extreme Networks / Extreme Networks Associate (ENA)

Extreme Networks / Extreme Networks Specialist (ENS)

Tropos Networks / Tropos Certified Associate (TCA)

The Light Brigade / Fiber Optics for Intelligent Transportation Systems Level 2

2001 – 2008

Computer Source Inc. – Lenexa, KS

Compaq / Accredited Systems Engineer (ASE)

Compaq / Accredited Integration Specialist (AIS)

IBM / eServer Certified Specialist xSeries (CS)

IBM / eServer Certified Systems Expert (CSE)

Novell CNE – Certified Netware Engineer (CNE)

Cisco / Certified Network Associate (CCNA) – (need to update)

Cisco / Certified Design Associate (CCDA)

Cisco / Wireless LAN Design Specialist (CWDS) - (need to update)

Cisco / Wireless LAN Support Specialist (CWDS) - (need to update)

1998 – 2001

General Electric / Information Technologies Solutions – Kansas City, MO

Compaq / Associate ASE certification

HP Star / NTP - NetServer Technical Professional certification

IBM / PSS – Professional Server Specialist certification.

Novell CNE – Certified Netware Engineer

1997 – 1998

American Freightways - Harrison, AR

TCT Certification Path - Digital Communications of the 90's - 6 module training course covering The Functions of Internetworking, LAN Installation & Expansion, T1 Components, Configuring IP Addresses and Subnets, SNMP Management Components, and Technical Overview of Frame Relay.

TCT Certification Path - Local Area Networks - 6 module training course covering DTE-DCE Interface and RS-232-C, Functions of Internetworking, LAN Configurations, WAN Developments and the Internet, Network Operating Systems (NOS) and Servers, and LAN Installation and Expansion.

Certificate of Completion - Leadership Effectiveness Training - 3-day training course on implementing employee participation in problem solving and decision making.

Certificate of Completion - Basic Supervision Seminar - 1-day seminar touching on the fundamentals of today's management techniques.

Sexual Harassment Training - 1-day course for managers that discussed how to recognize and address inappropriate behavior in the workplace that is considered to be sexual harassment.

Continuous Quality Improvement Diploma – In house project in which a group was chosen to identify problem areas with productivity and design and implement a solution to rectify the problem area.

1991 - 1993

Electronics Institute - Kansas City, MO

Associates Degree in Applied Science - Electronics Technology - 2160 accumulated hours consisting of Telecommunications, Microprocessor hardware, Hydraulic/Pneumatic devices, MS-DOS, Machine Language Programming.

1989 - 1990

Maplewood's Community College - Gladstone, MO

Certificate of Completion - Industrial Electronics - Basic fundamentals of electrical wiring, today's circuitry.

Skills

- Tropos Networks wireless routers – 7320 and 6320

- Extreme Networking L3 switches – BD6808, Summit 24, 200, 300, 400, 48Si, and 1i devices with respective firmware.

- Cisco 3500 Catalyst series, 2500 series routers.

- Cisco Aironet, Symbol Spectrum, 3Com and Linksys wireless access points

- Windows 3.x, DOS 5.x - 6.x, Win 95, Win NT Workstation 4.0, Win NT Server 4.0, Windows 2000, Windows XP, Windows 2003 server, MS Exchange Server 5.5, SMS Server 1.2, OS/2 2.1 and OS/2 Warp 4.0 operating systems.

- Banyan VINES 5.x - 7.x NOS Administration

- Hewlett Packard LJ3x - LJ5x, IBM 4232 impact, and IBM Network 17 printers

- Andrews and Fiberonics fiber repeaters

- AMP passive, IBM 8228 passive and IBM 8226/8224 (Ethernet) active MAU's

- IBM 8250 and IBM 8260 Multiprotocol Intelligent hubs and all respective fiber, ethernet, token-ring and management modules.

- IBM 8230 Controllers with respective 20 port LAM's

- IBM 6611 routers

- IBM 2456, Kodak High Speed, and Bell & Howell image scanners

- Symbol desktop and handheld laser scanners

- Watchguard and NetScreen firewalls

- AT&T Paradyne CSU/DSU's

- Conner, IBM, and Exabyte tape storage devices

- LX/SX Fiber optics, 10-Base-T, 10-Base-2, 10-Base-5, IBM Type-1, IBM Type-2 Communication media

- Banyan, JetX and Hewlett Packard print servers

- Citadel, NIS and Kinetic light grid computers

- Fluke Optiview Network Analyzer, Packeteer Packetshaper, and Network General Network sniffer, Noyes Optical Time Division Reflectometer, Fluke DTX 1800 cable certification