

**Killeen Independent School District
Job Description**

Job Title: Lead Network Technician
Department: Network Communications Department
Reports to: Manager, Network Communications
FLSA: Non-Exempt

SUMMARY

The Lead Network Technician's role is to coordinate strategies for designing, deploying, and maintaining the Killeen Independent School District's LAN & WAN infrastructure. This role requires extensive knowledge in LAN/WAN wired and wireless infrastructure management and maintenance techniques, documentation standards, performance monitoring and routing/switching troubleshooting techniques.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The Lead Network Technician is responsible for planning, implementing, maintaining, and supporting the Killeen Independent School District's wired and wireless LAN & WAN infrastructure. Additionally, the Lead Network Technician will provide general network support including project management, operation, expansion, and maintenance of various network-based communication systems.

Responsibilities to include, but not limited to:

Wireless Infrastructure Management

- * Provide 3rd tier support for the corporate network.
- * Design and planning of the Killeen Independent School District Enterprise level 802.11a/b/g/n infrastructure.
- * Knowledge of wireless tools such as AirMagnet, OmniPeek, Cognio, Chariot, etc...
- * Proficiency in wireless security authentication methods such as LEAP, EAP-FAST, PEAP, WPA2.
- * Knowledge of enterprise based wireless components to include Wireless Access Controllers, Wireless Access Points and wired network support infrastructure requirements.
- * Troubleshooting traffic using BGP and large scale network design and maintenance.

Wired Infrastructure Strategy & Planning

- * Collaborate with network team to ensure smooth and reliable operation of software and systems for fulfilling business objectives and processes.
- * Define business requirements and systems goals, and work to identify and resolve business systems issues.
- * Perform network design and capacity planning.
- * Develop, implement and maintain policies, procedures and associated training plans for network resource administration, appropriate use, and disaster recovery.

- * Create and maintain documentation as it relates to network configuration, network mapping, processes, and service records.
- * Develop, implement and maintain policies, procedures, and associated training plans for network administration, usage, and disaster recovery.
- * Develop and implement policies for network asset management, including maintenance of network component inventory, related documentation, and technical specifications information.
- * Aid in development of business continuity and disaster recovery plans, and maintain current knowledge of plan executables. Respond to emergency network outages in accordance with business continuity and disaster recovery plans.
- * Prepare and ensure accuracy of documentation, procedures manuals, and help sheets for network installations, including data, voice, and video systems

Wired Infrastructure Acquisition & Deployment

- * Design and deploy company LANs, WANs, and wireless networks, including routers, switches, Uninterruptible Power Supplies, and other hardware.
- * Conduct research on network/wireless products, services, protocols, and standards to remain abreast of developments in the networking industry.
- * Interact and negotiate with vendors, outsourcers, and contractors to secure network products and services.
- * Conduct research on network products, services, protocols, and standards in support of network procurement and development efforts.
- * Plan and implement any improvement, modification, upgrades, or replacement of network infrastructure components in accordance with published maintenance windows.
- * Establish and maintain connectivity and uptime service level agreements as established by the KISD Chief Technology Officer.
- * Support development and implementation of networking projects and new technology installations.
- * Maintain up-to-date knowledge of networking contract work and supervise contract-based installations.

Wired Infrastructure Operational Management

- * Configure networks to ensure their smooth and reliable operation for fulfilling business objectives and processes.
- * Monitor network performance and troubleshoot problem areas as needed.
- * Ensure network connectivity of all servers, workstations, VoIP equipment, and other network appliances.
- * Practice network asset management, including maintenance of network component inventory and related documentation and technical specifications information.
- * Monitor and test network performance and provide network performance statistics and reports.
- * Administer all network equipment upgrades according to published KISD maintenance windows.
- * Recommend, schedule, and perform network improvements, upgrades, and repairs.
- * Monitor and analyze network performance across the organization's LANs, WANs, and wireless deployments.
- * Ensure the stable operation and efficient performance of KISD's networks.
- * Monitor system capacity to determine its affect on performance and recommend enhancements to meet new or changing network demands.
- * Identify and remedy network performance bottlenecks.
- * Receive and respond to incoming calls and/or e-mails regarding network connectivity problems.
- * Prepare, maintain, and adhere to procedures for logging, reporting, and statistically monitoring network data.
- * Liaise with, and provide training and support to, help desk support staff on network issues.

- * Collaborate with Network Communications Team to ensure that VoIP traffic does not interfere with or hinder network data traffic.
- * Conduct testing and development disaster recovery plans to detect faults, minimize malfunctions, and backup systems.
- * Perform other duties as assigned

QUALIFICATIONS

EDUCATION and/or EXPERIENCE

High School Diploma or G.E.D. and a minimum of 5 years of experience implementing and maintaining a complex Cisco network to include:

- * Network planning and design experience.
- * Direct experience in designing and implementation Enterprise level wireless 802.11a/b/g/n.
- * Secure mobility design and voice/video over WLAN design.
- * Voice, data & video Quality of Service (QoS).
- * Design of Cisco ASR routers, Catalyst 65xx, 45xx, 37xx, 35xx switches, Nexus switches.
- * Access control list (ACLs), TCP/IP, VLANs, Port Security, Traffic Shaping, Priority Queuing, Class of Service (CoS), IP Multicast, OSPF, and BGP routing protocols.
- * IP routing protocols including BGP, OSPF, IP Multicast.
- * Network capacity planning, performance tuning and troubleshooting.
- * Thorough knowledge of Network Management tools (Solarwinds Performance Monitor) and Network configuration management tools (CiscoWorks / Solarwinds Configuration).
- * Excellent IP networking fundamentals and extensive experience in the application of IP protocols.
- * In-depth knowledge of and experience with major internet routing protocols including BGP and OSPF
- * In-depth knowledge of and experience with major router platforms; specifically with Cisco 37xx, 45xx, 65xx, and Nexus platforms including all compatible supervisory and line cards for these platforms.
- * Excellent network analysis fundamentals and robust troubleshooting skills.
- * Significant experience with, and expertise in many of the following protocols & technologies: T1/DS1, DS3, 802.1, VLANs/STP, IPv4 & IPv6, TCP (internals & flow control), BGP, OSPF, HSRP/GLBP, PIMv2, IGMP, TACACS, IPSEC & VPNs, Netflow, DNS.
- * Proficient in Microsoft Outlook, Word, Excel, Internet Explorer, Project, Visio, and PowerPoint.
- * Proficiency in problem solving and able to follow a systematic troubleshooting approach.
- * Self starter and display the ability to handle multiple responsibilities.
- * Ability to work under pressure and meet deadlines.
- * Ability to manage multiple projects and be capable of working in an environment where work priorities can change rapidly.
- * Excellent verbal and written communication skills in working with technical and non-technical people.
- * Ability to develop and maintain collaborative relationships among all levels of an organization.
- * Ability to work effectively in a team based environment and a demonstrated willingness to support team on all levels to get the job done.

SUPERVISORY RESPONSIBILITIES

Responsibilities to include, but not limited to:

- *Direct supervision of all Network Section employees including all Network Technicians and administrators.
- *Manage and direct employee training in accordance with the Division's Core Competencies.
- *Planning, assigning and directing of work for all team members through direct communication and HEAT ticket assignments.
- *Carry out supervisory responsibilities in accordance with Killeen Independent School District's policies and applicable laws.
- *Supervise all work pertaining to the section employees' essential duties and responsibilities, including redirection of team assets as mission dictates during periods of increased workload.
- *Direct the work of all contracting teams to include work assignment, procedural guidance and post-project inspection of work.

LANGUAGE SKILLS

Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of the organization.

MATHEMATICAL SKILLS

Ability to calculate figures and amounts such as discounts, interests, commissions, proportions, percentages, area, circumference and volume. Ability to apply concepts of basic algebra and geometry.

REASONING ABILITY

Ability to apply common sense understanding to carry out instructions furnished in written, oral or diagram form. Ability to deal with problems involving several concrete variables in standardized situations.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to stand, walk, use hands, handle, feel, climb and balance. The employee is occasionally required to sit, reach with hands or arms, and stoop, kneel, crouch or crawl. The employee must occasionally lift and/or move up to 50 pounds.

WORK ENVIRONMENT

The work environment characteristics described here are representative to those an employee encounters while performing the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently exposed to outside weather conditions. The employee is occasionally exposed to wet and/or humid conditions. The noise level in the work environment is usually quiet.

Prepared By: John Hocking, Network Communications Manager

Prepared Date: October 11, 2012

Revised By: Bruce Minzenmayer, Coordinator Auxiliary Personnel

Revised Date: February 7, 2013

The foregoing statements describe the general purpose and responsibilities assigned to this job and are not an exhaustive list of all responsibilities, duties, and skills that may be required.