

**Killeen Independent School District
Job Description**

Job Title: Telecommunications Technician
Reports To: Manager for Network Communications
FLSA Status: Non-Exempt

SUMMARY:

Coordinates strategies for deploying and maintaining the Killeen Independent School District's LAN & WAN infrastructure; and deploys and maintains the District's IP telephony, radio, camera, time clock, public address communications system along with the component hardware.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following:

Cisco VoIP Telephony

Assists in managing and administering the Cisco Unified Communications Manager (Cisco Call Manager) and Unity Connection voicemail systems, servers, and gateways.

Configures and deploys the full range of Cisco IP phones to campuses.

Manages and administers Cisco Unified Presence Server, Unified Contact Center Express, and Emergency Responder.

Manages and administers Cisco Unified Border Element voice gateway trunking.

Collaborates with Network team and Telecom Technical Manager to support and maintain superior global Unified Communications and videoconference networks.

Designs, configures, and troubleshoots existing PSTN architecture to include Fire and Security interconnectivity.

Maintains existing legacy telephony infrastructure for Nortel Option 81 and 11 systems programming.

IP Network Streaming Video Distribution System

Configures, develops, tests, and implements appropriate formats, bit-rates, encoding, compression, streaming and multicast settings for live video streaming events.

Provides support for the future of Killeen Independent School District's growing video streaming infrastructure and service.

Installs, maintains, and troubleshoots existing analog coaxial systems for media distribution and interconnectivity with new Safari Digital delivery systems.

Radio Communication Infrastructure

Manages the district radio-system network, ensuring all locations receive appropriate SLA levels.

Provides technical expertise, suggestions and design guidance for all KISD radio upgrades and expansions.

Ensures compliance with FCC rules and regulations.

Maintains all radio equipment, tower site equipment and Mobile Communications vehicle equipment.

Maintains the KISD Radio System FCC Licenses.

Conducts monthly inspections and periodical testing of the following as related to each radio site: Ground testing, site alarms, emergency generators, bench marking coverage.

Maintains required software configuration as it relates to the radio system.

Maintains and monitor the required FCC and OSHA radio frequency emissions compliance standards for the district's radio system.

Maintains the KISD Radio System equipment inventory and configuration documents.

Assists in the planning, design, and construction of radio systems (e.g. voice, radio, network, 2-way, data, microwave, etc.)

Analyzes radio systems problems and needs (e.g. interference, intelligibility, clarity, etc.) to determine the most appropriate means of reducing, eliminating, and/or avoiding current and future problems and improve communications.

Assists in design of radio communications sites to establish building and tower placement, power requirements, antenna placement, and radio communications equipment required for new and/or existing sites.

Completes and submits required frequency coordination forms, Federal Communications Commission radio license applications, and use permits to allow mobile radio and microwave communications to take place in accordance with federal regulations.

Assists in determining appropriate configurations of radio systems hardware and software to ensure the desired performance of radio equipment.

Assists in researching and compiling relevant technical information to enhance, modify, and maintain assigned networks and radio systems.

Evaluates new products and services from vendors to determine applicability to hardware, software, networks and radio systems.

Verifies proper frequency use and assignment, checks applications for compatibility with existing FCC licensed users.

Network Intercom/PA/Clock Infrastructure

Responsibilities to include, but not limited to:

Configures, maintains, and troubleshoots intercom system, microphones, speakers and Layer 1 cabling interconnects.

Maintains District-wide intercom infrastructure diagrams and intercom policies and procedures.

Configures, maintains, and troubleshoots District NTP-based IP digital clock architecture to include Stratum 2 servers and associated Campus Router/Switch configurations.

Configures quarterly bell scheduling per campus on an as-needed basis.

Layer 1 Cabling

Plans and prepares for Layer 1 cable installation to include site inspections, selection and verification of cable pathways.

Performs cable installations for inside and outside plants to include creating openings for cable pathways, installing/pulling medium in cable pathways, laying out and installing cable and supports, inspecting and preparing cables for installation, and installing fiber backbone and copper cables, horizontal cables and firestop systems.

Terminates/splices cables by installing mounting equipment, fiber and copper terminating and splicing components, electrical protection equipment, grounding, bonding connections/cables, cross connecting and patching cables

Performs labeling, testing and documentation by labeling cable systems as Unshielded Twisted Pair (UTP), Shielded Twisted Pair (STP), Screened Twisted Pair (ScTP) and completing field documentation

Troubleshoots cable systems/hardware by identifying and repairing UTP/STP/ScTP, coaxial cable systems, equipment connecting cables and fiber optic systems.

Wireless Infrastructure Management

Provides 3rd tier support for the corporate network.

Troubleshoots traffic engineering using BGP and large scale network design and maintenance.

Wired Infrastructure Strategy & Planning

Collaborates with network team to ensure smooth and reliable operation of software and systems for fulfilling business objectives and processes.

Maintains documentation as it relates to network configuration, network mapping, processes, and service records.

Aids 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.

Ensures accuracy of documentation, procedures manuals, and help sheets for network installations, including data, voice, and video systems

Wired Infrastructure Acquisition & Deployment

Deploys and maintains LANs, WANs, and wireless networks, including routers, switches, UPSs, and other hardware.

Wired Infrastructure Operational Management

Configures networks to ensure their smooth and reliable operation for fulfilling business objectives and processes.

Monitors and tests network performance, troubleshoot problem areas, and provide network performance statistics and reports.

Administers all network equipment upgrades according to published KISD maintenance windows.

Schedules and performs network improvements, upgrades, and repairs.

Receives and responds to incoming calls and/or e-mails regarding network connectivity problems.

Adheres to procedures for logging, reporting, and statistically monitoring network data.

Conducts testing of disaster recovery plans to detect faults, minimize malfunctions, and backup systems.

Performs other duties as assigned

SUPERVISORY RESPONSIBILITIES:

This job has no supervisory responsibilities.

QUALIFICATIONS:

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. This position requires specialized experience in configuring and troubleshooting network switches, routers and wireless devices, and other network hardware.

EDUCATION and/or EXPERIENCE:

Associate's degree in Networking, Network Management/Administration, or similar area of study **or** high school diploma/general education degree (GED) and two years of work experience in data networking to include LANs, WANs, wireless networks, routers, switches, Uninterruptible Power Supplies, telephony and voice/data systems, and related hardware.

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.

CERTIFICATES, LICENSES, REGISTRATIONS:

Must be licensed to drive a District vehicle. Cisco CCNP Certification or equivalent preferred.

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.

Revised Date: August 24, 2016

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.