



SENIOR NETWORK ADMINISTRATOR

Revised: 10/24/18

BRIEF DESCRIPTION OF POSITION:

Under the direction of the Director of Learning Support Services, employee will be responsible to plan, design, configure, implement, evaluate, test, upgrade and maintain and debug Local Area Networks (LAN), Wide Area Networks (WAN), Wireless Networks, network equipment operating systems, messaging systems, and IP telephone systems to meet the future needs of the district; and to provide network and administrative technical support for users. This classified management position requires demonstrated skills in local and wide area networks, telecommunications systems, data communications, computer hardware and software systems, network and computer operating systems, messaging systems, IP telephone systems, as well as skill in communication, public relations, research, and problem-solving.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- a. Plans, installs, configures, and monitors network cabling, switches, routers, firewalls, servers, and associated hardware and software to provide effective functionality of end-user devices and peripherals and promote the effective integration of technology into educational and operational practices within the district.
- b. Designs, implements, and maintains the District network (wired and wireless).
- c. Define and implement best practices for network and systems infrastructure and security.
- d. Manages and maintains enterprise DNS/DHCP services, wireless networking services, and enterprise networking authentication schemes.
- e. Analyze and resolve problems related to networks, servers, and end-user devices and applications.
- f. Assists network equipment providers in the configurations design to ensure optimal efficiency.
- g. Prepares cost analysis of proposed and existing network services, recommends contractual relationships with appropriate vendors and service providers, and implement effective cost control measures.
- h. Provides supervision for district technology staff, including technical assistance to site personnel regarding network operations, problems, malfunctions.
- i. Conducts routine audits of the systems' security controls and status and makes necessary adjustments as required
- j. Troubleshoot breaches in network security or network policies and remedy in a timely manner.
- k. Maintains and operates appropriate network and server monitoring and diagnostic equipment for capacity planning, upgrade requirements, preventative maintenance, and diagnostic purposes.
- l. Prepares and maintain documentation, including accurate records, logs and files for network and configurations, manage the placement of equipment, and maintain and monitor all network equipment inventory.
- m. Prepares and maintains accurate network diagrams, flow charts, graphic presentations, and narrative reports regarding all network systems, equipment and configurations.
- n. Performs related duties as required.

KNOWLEDGE AND ABILITIES:

Knowledge of:

- LAN/WAN technologies; including, TCP/IP, Quality of Service (QoS), wireless LANs, Cisco IOS, and Voice Over IP (VoIP) Networks and related security principles.
- Operating systems including Microsoft Windows, Mac and UNIX.
- Microsoft Messaging systems including Microsoft Exchange.

- Analytical, research, problem solving skills, and systems analysis and project management procedures and techniques.
- Telecommunications network design.
- State and Federal laws and regulations relating to telecommunications, teleprocessing, and networks.
- Information system network terminology and telecommunications policies, procedures, and vendors.
- Installation of data/voice communication networks, telephone systems, and related software and hardware.
- Desktop computer hardware and software; including operating systems and application software.
- Current trends, techniques, and general principles in new technology.
- Proper telephone etiquette and public relations skills.
- Communication linkage and networking methods, procedures, and techniques.
- Standard communications and line protocols.
- Basic applications and capabilities of designated software and hardware products and operating systems.
- Proper English usage, grammar, punctuation, and vocabulary.

Ability to:

- Communicate effectively verbally and in writing.
- Apply specialized knowledge of networks and related equipment (including switches, routers and firewalls) telecommunications systems, data systems servers, hardware and software systems to effectively implement and maintain a cost-effective network in an educational setting.
- Identify network related problems using effective troubleshooting and diagnostics techniques, taking appropriate action for resolution in a timely manner.
- Establish and maintain logs, records, lists, fact sheets, and files regarding specialized transactions, procedures, and policies.
- Prepare user guides and a variety of reports.
- Works with minimal supervision to meet user needs.
- Determine appropriate networking, teleprocessing and telecommunications equipment, software programs, and materials to meet user requests.
- Operate a variety of computer peripheral equipment including desktop and laptop computers as well as associated software.
- Perform arithmetic calculations accurately.
- Plan, organize, and prioritize assigned tasks and functions efficiently in stressful situations.
- Train and supervise site techs in the proper use and application of network equipment, software, and systems applications.
- Establish and maintain effective work relationships in the performance of required duties.

EDUCATION AND EXPERIENCE

Generally, any combination of education and experience that could likely provide the required knowledge and abilities would be qualifying. A typical method of demonstrating these requirements would be:

- Education: A Bachelor's degree in computer science, information systems, business administration, or a related field from a college or university with accreditation from one of the seven regional agencies authorized by the U.S. Department of Education.
- Experience: Four or more years of progressive, directly related experience, in network analysis and administration including the design, implementation, and maintenance of LAN/WAN servers, teleprocessing, and telecommunications system operations. Any combination equivalent to completion of two years of college-level coursework in data processing, computer science or related field and four years in information technology support.

REQUIRED CERTIFICATION AND LICENSING

Certification as a Cisco Certified Network Associate (CCNA) with one or more associate-level certifications preferred, or 4 years verifiable and documented professional experience demonstrating specialized knowledge of networks and related equipment (including switches, routers and firewalls) in LAN/WAN, telecommunications systems, data systems communications, servers, hardware and software systems.

Possession of a valid Class 3 California driver's license

PHYSICAL CHARACTERISTICS:

Seeing to drive and to inspect computer screens and output, hearing and speaking to provide training and to communicate with District staff, sitting for extended periods of time, walking, bending and reaching to retrieve and file records, dexterity of hands and fingers to operate computer equipment, perform lifting, pushing and/or pulling which does not exceed 50 pounds and may be required to use personal vehicle in the course of employment, may be required to work at a video display terminal for prolonged periods.

WORKING CONDITIONS:

Data Processing Center environment; subject to temperature variation and occasional noise from fans and computer equipment.