



NETWORK ADMINISTRATOR

Revision Date: 08/27/14

BRIEF DESCRIPTION OF POSITION:

Under the direction of the Director of Information Technology Services, employee will be responsible to plan, design, configure, implement, evaluate, test, and debug Local Area Networks (LAN), Wide Area Networks (WAN), Wireless, telecommunications and teleprocessing networks, network and computer operating systems, messaging systems, and IP telephone systems of considerable difficulty to meet the needs of the district; and to provide network and administrative technical support for users. Employees in this classification receive limited supervision within a general framework of standard policies and procedures. This job class requires certified 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 public relations, research, and problem-solving.

STATEMENT OF TYPICAL DUTIES:

- a. Plans, installs, configures, and monitors network cabling, switches, routers, desktop and laptop computers, servers, peripherals and associated software.
- b. Design, implement, and maintain the District network (wired and wireless).
- c. Define and implement best practices for network and systems infrastructure.
- d. Installs, upgrades, and supports network hardware and software needed to manage the district enterprise backbone network.
- e. Manages and maintains enterprise DNS/DHCP services, wireless networking services, and enterprise networking authentication schemes.
- f. Analyzes and resolves problems between LAN/WAN, servers, desktop computers, tablets and desktop applications.
- g. Assists network equipment providers in the configurations design to ensure optimal efficiency.
- h. Prepares cost analysis of proposed and existing network services, recommends contractual charges, service providers, and cost control measures.
- i. Provides technical support regarding network operations, problems, malfunctions.
- j. Analyzes symptoms of network user problems/malfunctions and determines appropriate action in a timely manner.
- k. Conducts routine audits of the systems' security information and reviews system/application access.
- l. Maintains and operates network and server monitoring and diagnostic equipment for capacity planning, preventative maintenance, and diagnostic purposes.
- m. Evaluate and research new technologies while weighing the benefits of new features against risks.
- n. Prepares documentation for the placement of equipment, and maintains and monitors its inventory.
- o. Maintains accurate records, logs, and files related to assigned local and wide area network and equipment inventory activities, servicing, operations, and functions.
- p. Writes articles, newsletters, and technical documentation Prepares network diagrams, flow charts, graphic presentations, and narrative reports to recommend improvements or resolve problems.
- q. Determines Local Area Network support requirements including servers, PC, BYOD and cabling for District wide networks. Provides technical assistance to site personnel regarding other Local Area Networks.
- r. Troubleshoots breaches in network security or network policy.
- s. 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) Network 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 orally verbally and in writing.
- Apply specialized knowledge in LAN/WAN, telecommunications systems, data communications, servers, hardware and software systems successfully.
- Identify network related problems through the performance of diagnostics, and determine appropriate action for resolution.
- Establish and maintain logs, records, lists, fact sheets, and files regarding specialized transactions, procedures, and policies.
- Prepare user guides and a variety of statistical and narrative reports.
- Work various shifts with minimal supervision to meet user needs.
- Determine 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.
- Coordinate and monitor teleprocessing and telecommunications networking activities with outside service providers/agencies.
- Train users in the proper use and application of network equipment, software, and systems applications.
- Establish and maintain effective work relationships with those contacted 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: Three 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 Professional (CCNP), CCNA, CCIE or equivalent and 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.