ANTELOPE VALLEY COMMUNITY COLLEGE DISTRICT

CLASS TITLE: NETWORK ADMINISTRATOR   **Salary Range 27**

BASIC FUNCTION:

Under the general direction of the Manager of Systems & Infrastructure, plan, analyze, develop, implement, secure, maintain and manage cost effective data and voice communications systems that support administrative and instructional needs. A Network Administrator is also responsible for the strategic implementation of network-based applications, systems, and security of all network resources.

REPRESENTATIVE DUTIES:

Serve as the District's network administrator for various locations; propose policies and procedures relating to network operations, security, and controls such as user access and re-routing, and assist in the implementation of such policies and procedures.

Plan, organize, and oversee projects related to the design, development, enhancement, maintenance, and implementation of local and wide area networks and related equipment; perform troubleshooting to identify network problems; take corrective actions to restore connectivity and network services to optimal service levels; exercise functional supervision over lower-level staff and contractors as warranted.

Design and maintain network infrastructure standards, including but not limited to routers, switches, firewalls, servers, and wireless and other network resources; ensure appropriate use of all district WAN facilities/dedicated bandwidth, carrier circuits, and wireless and microwave services.

Design, implement, and maintain technologies to ensure the security of all network and system resources; create and apply new firewall rules or modify existing rules to accomplish organizational objectives.

Collaborate with vendors to support and enhance existing network applications and infrastructure, evaluate project offerings, and produce and submit RFP, RFQ, and bid documents; maintain appropriate vendor relationships, and in conjunction with the purchasing department, negotiate purchase agreements and contracts; formulate and recommend future network strategic third-party alliances.

Install, administer, and troubleshoot telecommunication network equipment and telephones; provide technical assistance related to the maintenance of wireless communication devices, telephones, private branch exchanges (PBX), and voice messaging systems; may install wire and cabling in ceilings and walls.

Install, repair, and maintain District security equipment including video surveillance cameras, building access control systems, badge readers, alarm codes, mass notification systems, and related software.

Develop and promote network project proposals to ensure technically and economically feasible network systems are maintained throughout the district.

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Industry standards best practices for networking
Principles of project management
Routing hardware, software, and protocols
Firewalls and perimeter security, including strong encryption methodologies
Principles of Wide Area Network (WAN) design, implementation and management in a multi-site environment, including dedicated leased lines and microwave/wireless technologies
Principles of Local Area Network (LAN) design, including VLAN implementation
High-speed LAN and WAN technologies
Remote access methods, including Virtual Private Network (VPN) technologies, and thin-client servers
Open source and commercial network management systems, including knowledge of SNMP
Principles of network monitoring, including usage, performance and bandwidth management
Network troubleshooting techniques, including use of packet capture devices
Network services such as DNS and DHCP
Principles of networking a wide variety of systems including UNIX, Linux, and Microsoft Windows servers and clients
Principles of auditing network security, including log review and the use of filtering, tracking and event correlation tools
Intrusion detection and prevention systems
Principles of wireless technologies and options, both local and carrier
Principles of technical report writing

ABILITY TO:

Identify network system issues and opportunities, analyze problems and alternatives, and develop sound conclusions and recommendations
Understand, interpret, explain and apply applicable federal, state and local policies, laws and regulations
Effectively train non-technical personnel in IT-related subject matter
Communicate clearly and concisely, both orally and in writing
Establish and maintain effective working relationships
Work on multiple projects simultaneously
Work under changing and intensive deadlines with frequent interruptions
Prepare clear, concise, and comprehensive technical reports

EDUCATION AND EXPERIENCE:

Any combination equivalent to:

Education: Bachelor's degree in computer science, information technology, or a related field. Full-time work experience may be substituted year-for-year for degree requirement provided that graduation from high school or evidence of equivalent educational proficiency is met.

Experience: Five years of recent full-time, paid experience in the design, planning, installation, maintenance, and management of local and wide-area networks and communications equipment.

WORKING CONDITIONS:

ENVIRONMENT:

Office environment with time spent in computer hardware housing areas
Variable hours, including evenings

PHYSICAL ABILITIES:

Hearing and speaking to communicate with users
Ability to sit, stand, and walk for extended periods of time
Ability to work safely in confined spaces
Normal vision to design and troubleshoot network systems
Dexterity of hands and fingers to operate a computer keyboard, and utilize hand and power tools
Ability to safely lift heavy equipment and supplies
Ability to work safely at heights including the use of ladders and other related equipment

HAZARDS:

Risk of electrical shock due to exposure to computer hardware and moving mechanical parts
Extended use of keyboard and mouse
Extended viewing of a computer monitor