VENTURA COUNTY OFFICE OF EDUCATION

CLASS TITLE: NETWORK ADMINISTRATOR

BASIC FUNCTION:
Under the general direction of the Chief Technology Officer, as a member of the Network Services & Operations Team within the Technology Services Department, report to the designated team supervisor for assigned duties and project tasks; perform network service design, programming, and integration to provide Ventura County Office of Education (VCOE) departments, schools and customers with dependable and functional network services to meet user needs; evaluate, maintain, and improve VCOE network systems; assist with hardware maintenance County-wide; provide technical input and recommendations for new network systems and services planning. 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 VCOE's network administrator for all VCOE campuses and customers; assist in the implementation of policies and procedures relating to network operations, security, and controls such as user access. 

Install, administer, and troubleshoot data and voice network equipment and systems; provide technical assistance related to the maintenance of wired and wireless communication devices, audio visual systems, telephones, and voice messaging systems; may install wire and cabling in ceilings and walls.

Complete projects related to the design, development, implementation, maintenance, and enhancement 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.

Develop and maintain network diagrams and operation documentations.

Participate in the design and maintenance of network infrastructure standards, including but not limited to routers, switches, firewalls, servers, and wireless and other network resources. Ensure appropriate use of all VCOE WAN facilities/dedicated bandwidth, carrier circuits, and wireless and microwave services.

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.

Install, maintain, and operate VCOE network security and monitoring systems, 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 VCOE.

Perform related duties as assigned.
KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

• Principles of network design, switching, routing, and network security;
• Knowledge of general wiring specifications;
• Data communication and networking protocols, configurations, and linkages; OSI network model;
• Firewalls and perimeter security; Intrusion detection and prevention systems, and encryption technologies;
• Principles of Wide Area Network (WAN) implementation in a multi-site environment, including dedicated leased lines and microwave/wireless technologies;
• Principles of Local Area Network (LAN) implementation, including VLAN implementation
• Principles of wireless technologies and options, both local (e.g. Wi-Fi) and carrier (e.g. Licensed microwave and cellular);
• Remote access methods, including Virtual Private Network (VPN) technologies
• Open source and commercial network management systems, including knowledge of SNMP;
• In-depth network monitoring, including usage, performance, and bandwidth management
• Network troubleshooting techniques, including hands-on experience of packet capture tools;
• Network services such as DNS and DHCP;
• Principles of networking on a wide variety of operating systems, such as MS Windows, Linux, Mac OS;
• Auditing network security, including log review and the use of filtering, tracking, and event correlation tools;
• Network software licensing requirements and restrictions;
• Principles of technical report writing

ABILITY TO:

• Read, interpret, apply and explain technical issues and procedures in a clear and understandable manner;
• Maintain current knowledge of technological advances in the field;
• Perform complex network routing/switching design and programming to meet user needs;
• Provide technical input and recommendations for new system and network planning;
• Diagnose software and hardware problems and malfunctions in person and remote user support;
• Respond to user requests for assistance and malfunction correction and provide technical support;
• Analyze situations accurately and adopt an effective course of action;
• Demonstrated problem solving skills in a fast-paced and dynamic environment;
• Strong interpersonal, verbal and written communication skills;
• Strong organizational skills, flexibility and adaptability;
• Establish and maintain cooperative and effective working relationships with others;
• Work independently with little direction;
• Ability to work flexible hours as required;
• Observe legal and defensive driving practices;
• Understand, interpret, explain, and apply applicable federal, state, and local policies, laws, and regulations;
• Prepare clear, concise, and comprehensive technical reports
MINIMUM QUALIFICATIONS:
A bachelor's degree from a recognized college or university, preferably with coursework in management information systems, computer science, information technology, or a related field AND two years of experience installing and maintaining local and wide-area networks and communications equipment.

OR
An associate degree from a recognized college, preferably with coursework in management information systems, computer science, information technology, or a related field AND four years of experience installing and maintaining local and wide-area networks and communications equipment.

OR
Graduation from high school or evidence of equivalent educational proficiency AND seven years of experience installing and maintaining local and wide-area networks and communications equipment.

WORKING CONDITIONS:
ENVIRONMENT:
- Office environment with time spent in computer hardware housing areas
- Driving a vehicle to various VCOE and customer locations
- 8 hours per day, 5 days a week, may have flex days (various hours), including evenings, and weekend
- Subject to inside environmental conditions;
- Subject to driving to school VCOE sites to conduct work; and
- May be required to use personal vehicle in the course of employment.

PHYSICAL ABILITIES:
- Ability to sit, stand, and walk for extended periods of time;
- Ability to work safely in confined spaces;
- Dexterity of hands and fingers to operate a computer keyboard and utilize hand and power tools;
- Ability to safely lift heavy equipment and supplies weighing up to 50 pounds;
- Ability to work safely at heights, including the use of ladders and other related equipment;
- Normal vision to install and troubleshoot network systems; Require vision (which may be corrected) to read small print;
- Hearing and speaking to communicate with users;
- Kneeling and bending at the waist to work on equipment; Pulling and pushing 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

LICENSES AND OTHER REQUIREMENTS:
Valid California driver's license.

WORKING CONDITIONS:
Should an applicant require reasonable accommodation, the Ventura County Office of Education will consider that upon request.