



For the future of every student

CLASS TITLE: NETWORK AND SYSTEMS SPECIALIST

BASIC FUNCTION:

Under the general direction of the Chief Technology Officer within the Technology Services Department, provide network service design, integration, programming, integration, monitoring, update and deployment support to Ventura Unified School District (VUSD) departments, schools and customers. This position includes (but is not limited to) the support of district firewalls, switches, network filters, network monitoring tools, and other related networking equipment. This position will also provide server design, integration, programming, and monitoring support of the District's server environment in alignment and in conjunction with the Network and Systems manager. This includes the configuration, maintenance, upgrade and implementation of all District owned servers. This position will also assist in the architectural design of the District's infrastructure, in the implementation of industry best practices, policies, procedures, and guidelines to support daily operations and the District's user community. The Network and Systems specialist will incorporate Continuous Process Improvement techniques and standards as well as provide periodic updates to the CTO and the Network and Systems manager regarding the latest technologies available. The main purpose of this position is to provide a safe, secure, and stable computing environment for the Ventura Unified School District.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

Serve as the VUSD's network administrator for all VUSD campuses and customers; assist in the implementation of policies and procedures relating to network operations, security, and controls such as user access.

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

Develop and refine continuous process improvement plans and procedures for maintaining, enhancing and streamlining network and server operational procedures and tasks.

Complete projects related to the design, development, implementation, maintenance, and enhancement of local and wide area networks and server related equipment; perform troubleshooting to identify network and server 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, filters, servers, wireless devices, and other network resources. Ensure appropriate use of all VUSD WAN/LAN 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.

Support VUSD school sites on an as needed basis in the areas of computer and mobile devices, printers and software.

Develop and promote server and network project proposals that are technically and economically feasible.

Perform related duties as assigned that support the overall objective of the position.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Principles of network design, switching, routing, and network security.

Principles of server architecture, Microsoft Server 2012 or above.

Knowledge of general wiring specifications.

Knowledge of Continuous Process Improvement techniques.

Knowledge of DNS, DHCP, caching, print, and resource servers.

Data communication and networking protocols, configurations, and linkages

The 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.

Knowledge of scripting or programming languages to streamline daily operations.

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 and 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:

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.

Upgrade and maintain the server environment.

Provide technical input and recommendations for new server, 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.

Demonstrate 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 minimal 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:

Any combination of education, training and/or experience equivalent to:

A bachelor's degree from a recognized college or university, preferable 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, preferable 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 equivalent AND six years of experience installing and maintaining local and wide-area networks and communications equipment.

LICENSES AND OTHER REQUIREMENTS:

Valid California driver's license.

WORKING CONDITIONS:

ENVIRONMENT:

Office environment with time spent in computer hardware housing areas.
Driving a vehicle to various locations
May have flex days (various hours), including evenings, and weekends.
Subject to inside environmental conditions.

PHYSICAL DEMANDS:

Dexterity of hands and fingers to operate a computer keyboard and mouse.
Hearing and speaking to exchange information.
Seeing to view a computer monitor and read a variety of materials.
Sitting for extended periods of time.
Bending at the waist, kneeling or crouching.
Reaching overhead, above the shoulders and horizontally.