

Fremont Union High School District

Position: Senior Network Systems Specialist

Department/Site:	District Office	Range:	119
Reports to/ Evaluated by:	Coordinator of Network Operations & Technology Support	Work Year:	245
		Months:	12

Summary of Basic Functions & Responsibilities

Under the supervision of the Coordinator of Network Operations & Technology Support, designs, installs, configures, monitors, operates, and maintains server hardware and software for one or more local networks and multiple platforms governing data communications among personal computers. Participates in the installation and configuration of wide-area networks. Installs, configures, troubleshoots, and services networked computer workstations and related equipment and software used in administrative and instructional lab environments. Provides advanced technical support and help functions that relate to computer hardware and software, data communications, and connectivity. Understands and works effectively with people of differing cultures.

Essential Duties & Responsibilities

Incumbents may perform any combination of the essential functions shown below. This position description is not intended to be an exhaustive list of all duties, knowledge, or abilities associated with this classification, but is intended to accurately reflect the principal job elements.

- Participates in the installation and configuration of local and wide-area computer networks. Develops specifications and functional requirements for networks.
- Installs upgrades and enhancements to computer networks.
- Sets up related, dedicated servers to communicate on a network. Configures, maintains and participates in installation of directory structures, security applications and software. Specifies data communications requirements and wiring and hardware layouts for new or existing capacity.
- Installs, troubleshoots, and repairs computer network, network server, microcomputer, and computer peripheral equipment.
- Familiar with SSL Certificate Servers and maintaining secure IIS and Apache Web Servers.
- Understands and maintains SQL server & Database.
- Develops, integrates, maintains and monitors disaster recovery systems including backups and off-site storage of primary databases, applications and administrative file storage
- Installs and configures networked computer users, e.g., computers, printers, modems, cabling, and peripheral communications equipment. Installs software and configures systems to support electronic mail. Troubleshoots mail access problems.
- Upgrades network and microcomputer hardware, operating system and application software, patches, and other network and microcomputer software.
- Serves as a resource for a computer purchase upgrades and emerging technologies. Researches and recommends system and software upgrades for increased productivity and compatibility.
- Researches and creates quotes for equipment, software and other related items.
- May be required to input purchases into District purchasing system.
- May be required to monitor and update Department Budget
- Provides assistance to staff on using computer and software programs including remote access.
- Troubleshoots and performs various technical computer and peripheral repair duties that include but
 are not limited to diagnosing system failures and isolating faulty parts, repairing or replacing parts,
 and verifying and testing for correct operations.
- Installs and configures network users. Activates data communications ports using network software. Implements protocols for electronic mail systems and accounts.

- Researches and recommends change and upgrades to existing networks that enhance continuous operations, desired performance, and service.
- Performs preventive maintenance for computer equipment; tests, cleans and adjusts equipment as needed.
- Provides a range of troubleshooting to resolve network hardware and operations problems, including but not limited to connectivity, Internet access, and electronic mail and file servers.
- Updates existing security software on networks and workstations. Tests existing operating systems and personal computers for potential viruses and security problems.
- Implements protocols and procedural controls for operation of the network systems.
- Maintains an inventory of computer hardware and software; maintains other records on assigned equipment and utilization; monitors software license compliance.
- Develops and maintains up-to-date documentation supporting assigned and related areas of responsibility, including, but not limited to, computer lab use, maintenance requests, and repair requests.
- Operates a variety of test equipment, hand tools and power tools; operates a vehicle incidental to work activities.
- Assists in maintenance of District Web sites.
- Supports Cisco VOIP System including phone and account setup and maintenance, Cisco routers and switches including IOS upgrades, configuration and deployment.
- Provides supplemental support for site NSS personnel.
- Performs other duties as assigned that support the overall objective of the position.

Qualifications

Knowledge and Skills:

- Requires in-depth technical knowledge of personal computer operations, including the relationship and usage of various input and output components, business and education support software, and terminology.
- Requires knowledge of operating systems used in conjunction with networks.
- Requires a thorough knowledge of data communication protocols.
- Requires a thorough knowledge of wireless network connectivity and operations
- Requires a well-developed understanding of the protocols and procedures for setting up new equipment, troubleshooting and performing routine maintenance.
- Requires technical knowledge of personal computer-based local area networks, network operations, connectivity between servers, and integration of data and telecommunications.
- Requires knowledge of Website standard applications.
- Requires knowledge of SSL Certificate Servers.
- Requires knowledge of the following topologies and protocols: TCP/IP, IPX/SPX, NetBEUI, IGRP, Ethernet, and Access Lists.
- Requires knowledge of the physical elements of the network including: fiber optic, twisted pair, and coaxial Ethernet cabling and connections, and routing, switching, and repeating equipment.
- Requires sufficient human relations skill to conduct individual instruction and technical assistance on the use and application of PC-based business and education, Internet, utility, and connectivity software.
- Requires skill at conducting in-service type training.
- Requires sufficient writing skill to document technical procedures.
- Requires the ability to install small networks including but not limited to workstation-to-server and server-to-network communications on both Wired connections and wireless connections.

- Requires the ability to install, configure, and troubleshoot networked computer workstations, systems, and programs used by the District.
- Must be able to fabricate, install, and connect microcomputer components such as, but not limited to, cards and drivers, cables and connections between computers.
- Must be able to analyze data and evaluate the needs of users and develop the alternative solutions to problems and needs.
- Must be able to prioritize and organize work to meet deadlines and timetables.
- Must be able to read, interpret and apply complex technical information including equipment blueprints and schematics.
- Must be able to give one-on-one and small group training in the use of microcomputers and business and instructional software. This includes live demonstrations in conference settings.
- Requires the ability to work as contributing member of a team, work productively and cooperatively with other teams and external customers, and convey a positive image of the District and its services.
- Must be able to work with and maintain vendor relationships in support of network communications and offsite connectivity

Physical Abilities:

- Required to perform work of a sedentary to moderately active nature.
- Requires ambulatory ability to move to various offices and locations and to bend, stoop, crawl and reach to install cables and equipment.
- Requires sufficient hand eye coordination and dexterity to make small component connections.
- Requires sufficient visual acuity to read technical documents and instructions and align small components.
- Requires sufficient auditory ability to carry on routine conversations.
- Requires the ability to lift, push, and pull objects of medium weight (less than 50 lbs.) on an occasional basis.
- Requires the ability to work in confined areas having noise and ventilation considerations.
- Under some circumstances, further testing may be required to determine if an applicant is able to perform the essential duties with or without reasonable accommodation.

Education:

The position may require the equivalent to a Bachelor's degree in Computer Science, Information Systems/Technology or other related technical field and 5 years of experience in the setup of networked computer workstations and computer technical support.

Licenses & Certificates:

- Requires a valid Driver's License.
- Requires fingerprint clearance from the Department of Justice and Federal Bureau of Investigation.

Working Conditions:

 Work is performed in a high school library/media center subject to lifting, carrying, bending and stooping subject to constant interruptions.