STOCKTON UNIFIED SCHOOL DISTRICT

NETWORK ADMINISTRATOR

DEFINITION:

This individual provides support to school and District personnel in solving complex network connectivity and security problems, assess security issues and takes appropriate corrective action; monitors and generates reports of network performance and bandwidth utilization; evaluates, recommends, installs, and supports District network equipment and related software and hardware plus is responsible for all facets of the network connectivity, security, diagnosis, and resolution of hardware and software problems; ability to work independently with little supervision; writes and revises system documentation, documents security and exposures as well as any corrective actions related to work responsibilities.

Distinguishing Characteristics:

The Network Administrator (NetAdmin) is primarily responsible for supporting and maintaining the computer network infrastructure. Specifically, they are responsible for the upkeep of the data communication superhighway within the District, as well as the ingress/egress of data communication to and from the Internet, to include peer networks via virtual private networks. The NetAdmin serves as the escalation point for network infrastructure matters. Aside from supporting and maintaining the network, the NetAdmin is also responsible for the security upkeep of networking devices, such as access switches, core switches, wireless access points/controllers, and firewalls. The NetAdmin is the only position in the District authorized and uniquely qualified to install, manage, and maintain network-related equipment and devices within main distribution frames (MDFs), intermediate distribution frames (IDFs), and data centers owned by or under the responsibility of the District.

SUPERVISION RECEIVED AND EXERCISED
Receives direction from the Network Supervisor.

EXAMPLES OF DUTIES – (Incumbents may perform any combination of the essential functions shown below (E). 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 principle job elements.)

Oversee and direct the installation, configuration, and maintenance of networks and related equipment to carry data, voice, and video communications. *(E)*

Monitor and report network performance, utilization, trends, and recommendations for changes in network LAN/WLAN/WAN systems, structures, and procedures. *(E)*

Troubleshoot and resolve network problems to ensure user's access to District networks/systems and recommends/implements solutions. *(E)*

Troubleshoot and resolve basic server and related IT systems problems to ensure user's access to District networks/systems and recommends/implements solutions. *(E)*

Provides onsite support to administration and schools. *(E)*

Remotely diagnose and resolve end-user software issues as it relates to the network. *(E)*

Performs research to identify options for network enhancements and modifications. *(E)*

Implement and audit network and host based security in accordance with District. *(E)*

Network Administrator - Continued

Participates in the review and definitions of problems with emphasis on network security, firewalls, VPNs, network intrusion detection. *(E)*

Install and configure network equipment (routers, switches, DSU/CSU, wireless access points, wireless controllers, firewalls, etc.). *(E)*

Establish and maintain configuration control of network devices such as switches, routers, and controllers. *(E)*

Operates and controls mission critical systems and computer equipment along with auxiliary and peripheral components in accordance with standards operating procedures. *(E)*

Keep abreast of new software, hardware and networking products, developments and computer networking and utilization strategies. *(E)*

Provide users with network technical and diagnostic support; respond to the needs and questions of users concerning their access of resources on the network. *(E)*

Inspect and ensure that installation of conduits, cabling, and other work related to technology network infrastructure is performed in accordance with District standards and specifications. *(E)*

Maintain and operate various electronic testing equipment such as network testers, wireless testers, voltmeters, and signal generators as it relates to the network. *(E)*

When practical, pull cable for network-based systems. *(E)*

Prepare and maintain a variety of records, files and reports; maintain confidentiality of information related to students and personnel. *(E)*

Ensure compliance with federal, state and local electronic codes and appropriate safety procedures. *(E)*

Train and provide guidance to other Network Administrators as needed. *(E)*

Perform related duties as assigned.

QUALIFICATIONS:

Knowledge of:

- Routing protocols (RIP, IGRP, EIGRP, OSPF, BGP).
- Networking protocols including but not limited to TCP/IP, AppleTalk, DHCP, DNS, FTP, NTP, SNMP, SMTP, Telnet, TFTP, VLAN, VPN.
- Wireless networking technologies.
- Network management, packet capture, packet shaping, and monitoring on LAN/WLAN/WAN.
- Firewalls in a complex environment in enterprise and complex networking environment.
- Multi-laying routing and switching in an enterprise and complex-networking environment.
- Quality of Services (QoS) measures and methods.
- Windows Server environment and its interactions with the network.
- Telephone technique and etiquette;
- Oral and written communication skills;
- Correct English usage, grammar, spelling, punctuation and vocabulary;
- Interpersonal skills using tact, patience and courtesy.
- Organizational skills and public relations techniques.
- Methods, equipment and materials used in installation and repair or hardware and software systems, networks and the peripheral components;
- Federal and State laws, along with District's policies related to information access and confidentiality.
- Modern office practices, procedures and equipment.
- Safety measures and precautions;

- Methods, equipment and materials used in the maintenance and repair of technology equipment.
- Proper methods of storing equipment, materials and supplies;
- Basic purchasing procedures, terminology and inventory control and warehousing methods and procedures;
- Methods and techniques for tracking and managing services calls, tickets, and/or requests.

<u>Ability To:</u>

- Ability to work with a project timeline and workflow for timely completion.
- Analyze complex technical problems, evaluating alternatives, and recommending effective courses of action.
- Perform clean wire installations with proper wire management and installation techniques.
- Read, analyze, interpret, apply and explain rules, regulations, policies and procedures related to position.
- Gather, assemble, organize and prepare data from various sources.
- Communicate effectively both orally and in writing.
- Analyze situations accurately and adopt an effective course of action.
- Work cooperatively and effectively with others or independently under time constraints.
- Operate equipment used in the repair and service of network equipment.
- Read and use mechanical diagrams.
- Meet schedules and timelines.
- Plan and organize work.
- Train and provide work direction to others.
- Work confidentially with discretion.
- Understand and follow oral and written directions.
- Complete work with many interruptions.
- Maintain records and prepare reports.

<u>Education and Experience</u>**:**

Any combination of education, training, and/or experience equivalent to: BA/BS in Computer Science, Information Systems or comparable major. A minimum of five (5) years of progressively responsible experience in network administration in a complex technical computer/network environment.

<u>License or Certificate</u>
- Valid California Class C driver's license.
- Information technology industry certifications preferred
- Valid First Aid and CPR certificates must be obtained within sixty (60) days from date of hire

<u>WORKING CONDITIONS:</u>
<u>Environment:</u>

Office and school environment.
Driving a vehicle to conduct work as required by the position.

<u>Physical Demands:</u>

Employees in this position must have/be able to:

- Enter data into a computer system and operate standard office equipment.
- Hear and understand speech at normal levels and on the telephone with or without hearing aids.
- See and read a computer screen and printed matter with or without vision aids.

Network Administrator - Continued

- See, hear and speak with/without assistive devices sufficient to communicate effectively with others.
- Sit for extended periods of time.
- Bend at the waist.
- Reach overhead, above the shoulders and horizontally
- Forceful grasping sufficient to install equipment.
- Push/pull up to 130 lbs.
- Lift/move equipment weighing up to 51 pounds using safe and proper methods and/or equipment, from ground level to up to level of 3 feet; to a distance of up to 50 feet.
- Lift/move equipment weighing up to 130 pounds with assistance, using safe and proper methods and/or equipment from ground level to up to level of 3 feet; to a distance of up to 50 feet.
- Bend at the knees for proper lifting technique.
- Occasionally kneel, crouch and/or stoop for short periods of time.