

Metropolitan Education District Network Specialist



Location:	Metropolitan Education District (MetroED) 760 Hillsdale Avenue, San Jose CA 95136
Reports To:	Director of IT
Classification:	Classified; CSEA bargaining Unit
Date Approved:	4/8/1998
Dates Revised:	7/15/2000, 2/2002, 6/11/2008, 8/27/2008, 8/17/2016
Position Control:	#142231, Salary Schedule 2, Range 41, 12 Month Work Year

POSITION DESCRIPTION:

Under limited supervision, of a designated administrator, plans, monitors, tests, debugs, administers District's Wide Area Network (WAN), and Local Area Network (LAN); determines and resolves WAN, LAN and telecommunications problems; recommends service improvements and cost control measures; plans, monitors, tests, debugs, administers central and remote servers using Network File Services (NFS), Domain Name Services (DNS), Simple Mail Transfer Protocol (SMTP), File Transfer Protocol (FTP), Hyper Text Transfer Protocols (HTTP & HTTPS), Secure Shell (SSH) Telnet and Dynamic Host Control Protocol (DHCP), Network Address Translation (NAT), authentication and other services; coordinates installation of servers with end-users and vendors; determines and resolves server problems; implements, maintains and recommends appropriate security measures for District's electronic mail system, Voice-over-Internet Protocol (VoIP) telephony system, storage area network (SAN), network attached storage (NAS) Virtual Private Networks (VPNs) and security camera systems; maintains accurate records and prepares reports.

AREAS OF RESPONSIBILITIES/DUTIES:

Essential Functions:

- Coordinates and provides technical support to end-users consistent with the District's expectations of high quality and efficiency
- Provides on-site district-wide technical support for all end-user computer related issues
- Provides back-up support for printer connectivity issues relating to the District's student attendance client application eClassManager for school attendance software
- Supports the WAN, LAN, network related services, telephony, Uninterruptible Power Supply (UPS), power generators and video security cameras
- Responsible for planning, developing and implementing technical aspects of agreed-upon network solutions; attention to detail, and high level problem-solving skills
- Participates in District's technology planning, including working with District's Technology Committee
- Works with school technology teams as needed to make appropriate technology decisions
- Implements appropriate aspects of District's technology plan; analyzes and interprets technology phenomena for education applications
- Works under minimal direction in the analysis and resolution of moderately complex network communications and hardware problems
- Implements, proactively tests, troubleshoots and effectively manages District's personal computers connected to a series of host computers and the Internet
- Maintains District's Primary and Secondary Domain Name Servers (DNS), electronic mail servers, routers, firewalls; switches, wireless access point
- Identifies network bottlenecks, develops, administers, and implements solutions to remove bottlenecks

AREAS OF RESPONSIBILITIES/DUTIES (continued):

Essential Functions:

- Analyzes and directs resources for installation, maintenance and repair of a variety of computers and peripherals
- Prepares and monitors network utilization for growth trends, cost-effectiveness, and reliability
- Provides back-up support for the attendance software
Installs, configures and maintains HP P-Class Blade servers; understands and able to implement ESX VMware using virtual hosting technologies
- Attends workshops, conferences and technical seminars to maintain and update technical knowledge
- Pursues additional training to enhance and keep abreast of new technologies; administers the District's computers and network operating systems, creating and maintaining user accounts, monitoring systems performance and results, upgrading/updating, developing problem resolution; and performs necessary adjustments and configuration
- Evaluates and implements methods and procedures for administering and troubleshooting Internet communications in a multi-protocol environment; maintains, administers and upgrades
- Thoroughly understands authentication, File Transfer Protocols (FTP), Hyper Text Transfer Protocol (HTTP) Simple Mail Transfer Protocols (SMTP), Printers, Network Files Services (NFS) and other services on the District's networks
- Plans, designs, develops, and implements methodologies for Internet security;
- Installs, maintains and protects individual systems and users security
- Designs and implements the installation and maintenance of network hardware, software, mainframe, electronic mail and bulletin board systems
- Maintains the SAN/NAS backup system and performs other duties as assigned

EMPLOYMENT STANDARDS

Working Knowledge of:

- Wide Area Networks (WAN) and Local Area Networks (LAN)
- Virtual Private Networks (VPN)
- Network Traffic Prioritization Standards (802.11p & q)
- Dynamic Host Control Protocol (DHCP)
- Storage Area Network (SAN) & Network Attached Storage (NAS);
- HP EVA4000 and Data Protector
- Voice-over-Internet-Protocol (VoIP) Telephony
- ATM/DS3/OpteMan AT&T circuits
- E911 California Emergency Response System
- FortiGate 1000AFA2 Firewall
- P-Class Blade Servers
- Windows Servers and Desktops
- Unix Servers
- Networked Printers
- Network Protocols
- Computer Programming Languages

EMPLOYMENT STANDARDS (continued):

Ability to:

- Quickly identify system/program problem areas and situations;
- Effectively evaluate problem causes and take appropriate action to resolve issues identified
- Configure and setup District routers and firewalls
- Opens conduits for specific ports; blocks or accepts network traffic based on policy
- Operate a variety of microcomputers, printers and other peripheral equipment
- Maintain accurate records, inventories and files
- Maintain current knowledge of technological advances in the field
- Work independently with little direction
- Establish and maintain effective interpersonal relationships with others
- Communicate effectively in oral and written English
- Plan, design and carry out a project
- Work effectively with a diverse group of internal and external customers with diplomacy, friendliness, poise and firmness if required
- Lift and move heavy boxes and equipment weighting up to 35 lbs.
- Learn technologies and proactively apply the technologies to networks

MINIMUM QUALIFICATIONS:

Specific knowledge required to satisfactorily perform the functions of the job include:

Experience:

- Four years experience in system administration and operation of Unix and Windows servers
- Two years of network experience
- Oracle database experience a plus;
- Sun Solaris experience a plus
- Two years' experience with installation and support of Windows XP desktops

Education and Credentials:

- Four years of college-level course work in computer science or related field or a combination of four years of progressive experience in a UNIX Windows environment, installation, trouble-shooting, and administration of a minimum of two years experience in UNIX.
- CNE certification desirable.

License:

Must possess a valid California Driver's License and/or be able to provide own transportation in conduct of work assignments.

Expectations:

The District places a high value on employees that are enthusiastic, cooperative, resourceful and knowledgeable, possess and display a strong work ethic and a customer-service and positive attitude. Employees are expected to understand and support the District's mission, strategic objectives, policies and goals.

MINIMUM QUALIFICATIONS (continued):

PHYSICAL REQUIREMENTS:

Incorporated within one or more of the essential functions of this job are the following essential physical requirements

- Incumbents regularly stand and sit for long periods of time
- Walk short distances on a regular basis
- Use hands and fingers to operate a computer keyboard or other office and technical equipment
- Reach with hands and arms, bend, twist, stoop, kneel, or crouch; speak clearly and distinctly over telephones and to provide information
- See to observe students and to read fine print and operate computer; hear and understand voice over telephone and in person
- Lift materials weighing up to 25 pounds and move and transport materials weighing up to 30 pounds

Date: _____

Signed: _____
Employee Signature