

## **LA MESA-SPRING VALLEY SCHOOLS**

### **CLASS TITLE: NETWORK ENGINEER**

#### **BASIC FUNCTION:**

Under the direction of the Technology Manager, installs, repairs, maintains and administers network systems and subsystems within the District to enable consistent internet access required for student learning and business systems; resolves network operational issues for District wireless system, VoIP system, WAN/LAN connectivity and web security; monitor network performance; maintains computer hardware, software and the network; provide information, direction and recommendations regarding computer equipment, network security appliances and software.

#### **REPRESENTATIVE DUTIES:**

##### **ESSENTIAL DUTIES:**

Administers systems and servers related to District LAN, WAN, and VoIP including directory services, e-mail, DNS, DHCP, web filtering, proxies, routers, switches, security, network monitoring and backups; optimizes throughput, secures data, oversees backup and recovery capabilities and assures availability of services to authorized users.

Communicates with various personnel, departments and outside agencies to exchange information, coordinate activities and resolve issues or concerns; responds to inquiries from District personnel and provides information and solutions for network problems.

Coordinates network hardware and software upgrades, changes and repairs accordingly; maintains virtualized server environments; installs and manages hosts, virtual machines, configuration of servers and applications and user data backups.

Installs computer equipment, network (client and server) hardware, routers and switches from a variety of manufacturers; performs various duties in upgrading and maintaining related equipment and software.

Installs computer software including operating systems, service packs and application software; maintains and troubleshoots cloud services and user accounts.

Maintains and deploys District wireless network equipment utilizing appropriate access points; installs and configures access points at District locations; provides operational support and troubleshooting of connectivity issues with related equipment and devices; recommends appropriate actions to maintain network operations and user productivity.

Maintains network operations and related software applications as assigned and assures efficient program operations within the District; deploys, configures and maintains security appliances to combat web security threats, reduce malware infections, safeguard student internet usage and prevent data loss by utilizing SSL inspection and various web filtering policies.

Participates in developing long and short-range plans for the design, testing, installation and maintenance of network equipment, policies and practices in order to meet the distributed processing technology needs of the District; plans optimum end user solutions using current and emerging technologies.

Performs various duties in the engineering design, deployment, management and maintenance of network equipment, assigned network servers and assigned backup systems; assesses malfunctions of network hardware and software applications; determines appropriate actions to maintain computer and network operations.

Prepares and maintains various records, reports and written materials related to assigned activities.

Researches new products and technologies for possible implementation within the District; deploys new hardware and software solutions based on new and current technologies; recommends purchase of equipment, supplies and materials as needed; repairs, replaces and upgrades network and server-related equipment including routers, switches and firewalls.

#### **OTHER DUTIES:**

Attends and participates in meetings, in-service trainings, workshops and conferences.

Performs related duties as assigned.

#### **KNOWLEDGE AND ABILITIES:**

##### **KNOWLEDGE OF:**

Data communications and network protocols.

Data processing systems and procedures.

Hardware and software diagnostic tools and programs.

Internetwork operating system configurations for switches, routers and firewalls.

Interpersonal skills using tact, patience and courtesy.

LAN and WAN network software and hardware configurations and enhancements.

Microsoft and other assigned servers.  
Network system design and implementation.  
Oral and written communication skills.  
Related routing, configuration and troubleshooting methods.  
Technical aspects of field of specialty.  
Virtualization platforms.  
VoIP communications and configurations  
Wireless networking technologies and troubleshooting methods.

**ABILITY TO:**

Analyze, troubleshoot and correct complex network protocol and data communications issues.  
Develop and deliver training programs.  
Establish and maintain cooperative and effective working relationships with others.  
Implement new applications and programs.  
Install and configure a variety of microcomputer and high-speed data communications equipment.  
Learn new computer applications.  
Meet schedules and timelines.  
Plan and organize work.  
Provide technical assistance to department and site personnel in the operation of business and instructional software, microcomputer hardware and peripherals.  
Recommend, design, install, maintain and administer LAN and WAN computer systems and peripherals.  
Work independently with little direction.

**EDUCATION AND EXPERIENCE:**

Any combination equivalent to: bachelor's degree in computer science, information systems or a related field and four years of responsible experience in designing, building and troubleshooting complex computer networks.

**LICENSES AND OTHER REQUIREMENTS:**

Successful passage of the District's job-related proficiency test.  
Valid system-related certifications.  
Valid California Class C Driver's License and evidence of insurability.

**WORKING CONDITIONS:**

**ENVIRONMENT:**  
Office environment.

**PHYSICAL DEMANDS:**

Bending at the waist, kneeling or crouching.  
Climbing ladders.  
Dexterity of hands and fingers to operate a computer keyboard.  
Hearing and speaking to exchange information in person or on the telephone.  
Lifting, carrying, pushing and pulling heavy objects.  
Reaching overhead, above the shoulders and horizontally.  
Seeing to view a computer monitor.  
Sitting and standing for extended periods of time.

**HAZARDS:**

Climbing ladders and working from heights.  
Traffic hazards.

**FLSA Status**

Non Exempt

**Approval Date**

3/01/08, 9/28/17, 2/18/20