



Leadership • Collaboration • Support

## **JOB TITLE: Senior Network Engineer**

### **Classified Managers Salary Schedule, Range 14**

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#### **DESCRIPTION OF BASIC FUNCTION AND RESPONSIBILITY**

To implement and manage the operation of the agency's local and area-wide (wide area) network(s), including firewall, network security, as well as a variety of computer hardware and software applications. Provides management-level, end-user-level support and training in operations related to networking and electronic communications. Also serves as a principal contact with respect to the agency's relationship with networking and telecommunications providers, as well as customers who rely on the Solano County Office of Education (SCOE) for networking and telecommunications services.

#### **JOB REQUIREMENTS AND QUALIFICATIONS**

##### **Education and Experience**

Five years of progressively responsible experience designing, securing, and managing Ethernet-based networks. A strong understanding of modern internet protocols, and a thorough knowledge of LAN and WAN routing and security. Any combination of education and training equivalent to a bachelor's degree that demonstrates the ability to perform the duties and responsibilities. Advanced coursework or training in firewalls and computer networks is required.

##### **Knowledge of:**

- Next-generation firewall operations and best practices.
- Local and area-wide network operations.
- Server and client configurations.
- Variety of networking protocols.
- Network management, security, and productivity tools.
- Palo Alto Networks Certified Network Security Administrator or Certified Security Engineer Certification preferred.
- Experience in eRate a (Schools and Libraries Program of the Universal Service Fund) and other federal programs.

Ability to:

- Communicate clearly and concisely, both orally and in writing.
- Interpret and explain technical concepts to non-technical customers and staff.
- Learn new software applications and networking principles.
- Must be able to prioritize, organize and schedule work assignments and projects.
- Establish and maintain cooperative working relationships with those contacted in the course of work.
- Travel independently to various agency sites located throughout Solano County.

**ESSENTIAL DUTIES**

- Designs and maintains SCOE's firewall and network security protocols.
- Implements network security policies and protocols to secure the organization's network resources and data.
- Assists district partners with firewall and network security.
- Helps design and maintain SCOE's local and wide area networks.
- Selects and installs bridges, routers, switches, load balancers and related equipment that support various networking protocols and securities.
- Maintains existing Wide Area Network/Local Area Network (WAN/LAN), internet, Domain Name System (DNS) servers. Maintains SCOE's SSL certificates.
- Installs and manages approved networking security strategies which ensure that the SCOE network is accessible only to authorized users.
- Serves as a primary contact with networking service providers and customers and plays a key role in negotiating and developing plans for future services.
- May train SCOE and district staff on the use of the network, conferencing, and security systems.
- Participates in community and statewide work groups relevant to his/her areas of expertise.
- Purchases, maintains, and configures the hardware for WAN/LAN and wireless networks.
- Engages with network carriers to ensure optimum service, including the addition of new circuits and discontinuance of circuits and services that are no longer needed.
- Manages the next-generation Palo Alto firewall and related services used by SCOE and its internet service customers.

## **MARGINAL DUTIES**

- Conducts local and regional technical workshops as directed.
- Monitors the billing for SCOE network-related services for Schools and Library \*(eRate) programs.
- Manages the building electronic access control.
- Performs other duties as required.

## **SUPERVISION RECEIVED**

Employees in this classification receive limited supervision within a broad framework of overall objectives. Directly responsible to the Director of Information Services and Technology.

## **SUPERVISION EXERCISED**

May supervise clerical, technical, and professional staff as assigned, including key staff responsible for delivering user support and training.

## **PHYSICAL ACTIVITY REQUIREMENTS**

Work Position (Percentage of Time):

Standing (35%)

Walking (30%)

Sitting (35%)

Body Movement (Frequency):

None (0)

Limited (1)

Occasional (2)

Frequent (3)

Very Frequent (4)

Lifting – lbs. (0-40)

Lifting (3)

Bending (3)

Pushing and/or  
Pulling Loads (1)

Reaching  
Overhead (2)

Kneeling or  
Squatting (3)

Climbing Stairs (3)

Climbing Ladders (2)