

JOB DESCRIPTION
October 2021

Placer County Office of Education
1400 W. Stanford Ranch Rd.
Rocklin, CA 95765

SENIOR NETWORK ENGINEER

General Purpose:

A Senior Network Engineer is responsible to the County Superintendent and works under the direct supervision of the Director, Information Technology & Communications. Assists in the design, development, and support system for implementing cost-effective methods of computer networking for school sites, district offices and the Placer County Office of Education (PCOE). The incumbent will also provide trouble-shooting services for established network users as required. The incumbent will be competent in a variety of networking technologies, including local and wide area networking hardware and software on levels of hardware from microcomputers to mainframes including all Internet related applications.

Essential Functions and Responsibilities include the following. Other duties may be assigned as required:

- Provides a variety of consultation and support services in the planning and development of local and wide area networks to connect classrooms to the Internet.
- Implements software monitoring tools to monitor resources and makes assessments of network hardware needs.
- Installs, maintains and troubleshoots various server and storage architecture.
- Works with internet connection providers to coordinate district connections and setup security standards as needed.
- Responds to service and support requests, maintains documentation, and provides status reporting for a variety of network-related technology.
- Makes on-site visits throughout the county and the region to evaluate networking and telecommunications needs and to recommend solutions.
- Provides phone support and availability as needed.
- Trains site and district personnel to set-up, install, configure, and maintain a variety of networking software and devices including hubs and routers.
- Prepares and distributes informational materials to the clients of the county and the region regarding Internet access and resources.
- Works with PCOE and regional staff to contribute to the growth and development of the Satellite Technology Centers.
- Contributes to a positive, healthy, friendly, and safe work environment.

Minimum Qualifications:

Employment Eligibility:

- Successful candidate must provide proof of employment eligibility and verification of legal right to work in the United States in compliance with the Immigration Reform and Control Act.

Education:

- Equivalent to graduation from a four-year college with a major in computer science, telecommunications, or a closely related field.

or

- Two years of course work in computer science, with an emphasis on networking and telecommunications, combined with two years paid work experience in design configuration, implementation, testing, and trouble-shooting of local and wide area networks.

SENIOR NETWORK ENGINEER/PAGE 2

Experience: Comprehensive experience and training in network design, implementation and support of all network related devices is required.

Knowledge, Skills, and Abilities:

- Knowledge of wide area networks and inter-relation to local area network.
- Knowledge of principles of data transmission between cloud-based services, server architecture and user assigned computers.
- Knowledge of LAN elements including servers, clients, protocols, and drivers.
- Knowledge of LAN functions including file services, security management, printer services, and e-mail services.
- Knowledge of LAN cabling systems including CAT 5e, 6, 6e Ethernet, fiber optic, switches, and backbones.
- Knowledge of networking performance characteristics including typical bottlenecks, utilization, and scalability.
- Knowledge of telecommunications methods, analog, VOIP and FDDI.
- Knowledge of internet services, including WWW, SFTP and VPN.
- Knowledge of internet protocols and tools including HTTP, HTML, and TCP/IP.
- Knowledge of Microsoft Azure environments.
- Skills to operate systems including at least three of the following: UNIX, LINUX, Server OS 2012 R2, 2016, 2019, Windows 10, Remote Desktop Services and Hyper V Manager.
- Skills in administration of a Microsoft Office 365 environment.
- Skills in data processing methods, systems, equipment, and applications, including design, implementation, and troubleshooting of local area networks.
- Skills in microcomputer software including file managers, database software, spreadsheets, word processing, and graphics.
- Skills to provide technical repairs on server architecture.
- Skills to diagnosis and identify software and hardware problems.
- Skills to provide methods of interfacing and configuring servers, storage arrays, switches, routers, firewalls, microcomputers and peripherals.
- Skills to provide a variety of consultation and advice in the utilization of networking technology.
- Skills to analyze and correct user networking, microcomputer equipment, software, and operating system problems.
- Skills to develop informational material that demonstrates effective communication in both technical and non-technical terms.
- Ability to provide technical training techniques and methods.
- Ability to effectively manage complex networking projects, including scheduling of implementation steps with testing, piloting, and status reporting.
- Ability to read, interpret, and apply complex technical information from source documents.
- Ability to deal tactfully and courteously with users in training and technical assistance environments.
- Ability to establish and maintain cooperative working relationships.

SENIOR NETWORK ENGINEER/PAGE 3

Required Testing:

- Written computer skills test.

Certificates & Licenses:

- Must possess a valid California driver's license issued by the State Department of Motor Vehicles.
- PAN Certified Network Security Administrator or Microsoft Certified Administrator preferred.

Clearances:

- Criminal Justice Fingerprint Clearance
- TB Clearance

Work Environment:

- Work is performed in an office or school environment, continuous contact with staff, and representatives of other agencies.

Physical Requirements:

- Facility to sit for extended periods at a desk, conference table, or in meeting rooms.
- Facility to frequently stand and walk; bend, stoop, and reach overhead.
- Normal manual dexterity and eye-hand coordination, including the ability to work with small electronic components and parts.
- Physical agility to lift and move objects up to 25 lbs.
- Facility to see and read a computer screen and printed matter with or without visual aids.
- Facility for verbal communications including the ability to speak and hear at normal room levels.
- Facility to use computer terminals, telephones, calculators, copiers, and facsimile.
- Facility to work in confined or irregular work spaces in the effect of computer repair.
- Facility to drive a car and the means to provide own transportation when required.
- Mental acuity to: assist in the management of Information Technology Programs, consult with management on policy decisions, evaluate results, and make recommendations relative to the effective performance of the tasks.

NOTE: This list of essential functions and physical requirements is not exhaustive and may be supplemented as necessary in accordance with the requirements of the job.

FLSA Status: Non-exempt Employee

Group: Classified **Salary Grade:** 40.0

SENIOR NETWORK ENGINEER/PAGE 4

Reviewed and Approved:

Supervisor:

Date:

11/19/21

Human Resources:

Date:

11/18/2021