

NETWORK ENGINEER [2-429]

POSITION DESCRIPTION:

The job of Network Engineer is done for the purpose(s) of performing advanced technical work in planning, installing, repairing, troubleshooting, maintaining and upgrading the following: switches, routers, wireless infrastructure, monitoring and alerting systems, network based telecommunications, firewalls, and other various services or equipment that support the Riverside County Office of Education (RCOE) and its customers.

FUNCTIONS:

- Assists in designing, installing, maintaining and troubleshooting a variety of technologies to improve the efficiency of existing networks
- Configures firewalls, routing and switching to maximize network efficiency and security
- Tests, schedules, and implements updates to network equipment and systems to maintain system integrity (E)
- Researches, evaluates and recommends hardware/software solutions to ensure effective network operations, develops and provides set-up specifications and parameters in the development of interfaces and other automated processes, develops specifications for systems modifications, corrections and testing of these systems prior to implementation (*E*)
- Utilizes scripting and/or interpreted languages to automate tasks and perform customizations to network systems (E)
- Implements, updates, and maintains various operating systems including Windows, Linux, Unix, etc. and the applications that are installed on those operating systems (E)
- Configures and maintains various network technologies including VLAN, VxLAN, VPN, QoS, LAN/WAN/MAN, Software Defined Networks, IP Voice services, IP addressing, etc. (E)
- Installs, configures and supports network equipment including routers, proxy servers, wireless access points, wireless controllers, switches, DNS and DHCP (E)
- Provides remote and onsite support for organizational needs
- Works directly with vendors and manufacturers in product evaluations, selection, and implementations (E)
- Assists in the documentation and implementation of standards, procedures, and acceptable use guidelines for department projects and services to ensure program consistency (E)
- Assists in the simulation of network failures and conducts regular data recovery drills of production backups to validate full network recovery
- Records and interprets network performance data and metrics for the purpose of providing documentation to assist with decision making (E)
- Participates in change control and patch management (E)
- Performs job assignment safely for the purpose of protecting people and property (E)
- Performs other related duties as assigned

(E) = Essential Function

KNOWLEDGE of basic math; best practices used within information the technology industry; scripting languages operational procedures, and documentation conventions; basic computer hardware repair and system components; LAN/WAN technologies management and maintenance; various data communication systems and protocols; various modern operating systems; network hardware and software maintenance and programming; network security concepts and implementation, and host/network based firewalls; routers and switches; VLAN, VXLAN, VPN, QoS, LAN, WAN, MAN; wireless access points;

operating systems; network recovery procedures; troubleshooting procedures; equipment used to diagnose system issues; project management techniques, system data and metrics; and data recovery and data backup procedures and techniques.

SKILLS are required to perform multiple technical tasks with a view to regularly update skills due to changing job conditions caused by technology trends and continually evolving industry changes.

ABILITY to gather, collate, and/or classify data for logical relational purposes; use basic job related equipment and tools such as toners, probes, software utilities, and monitoring applications; conduct computer hardware repair; demonstrate conscious care when handling sensitive media, parts, and data; analyze data; use equipment for a variety of purposes for various methods of operation; interpret written procedures; write routine documents, speak clearly; change control documentation, approvals, and reviews; analyze situations to define issues and draw conclusions; basic record keeping; sorting and filing; principles and methods of operating high availability technology infrastructure; utilize a wide variety of job related tools and utilities with increasing aptitude; communicate effectively both orally and in writing; follow verbal and written direction and instructions when performing work assignments; maintain safety and health standards in the work place at all times; answer phones; sort and file; analyze issues, create plans of action, and reach solutions; establish and maintain effective and cooperative working relationships; work independently with minimal supervision to complete assignments; utilize tact, patience, and courtesy with a service-oriented attitude; perform overtime as needed; meet the travel requirements of the job; and perform job safely.

WORKING ENVIRONMENT:

The usual and customary methods of performing the job's functions requires the following physical demands: lifting, carrying, pushing and/or pulling up to 50 pounds; some climbing and balancing; some stooping, kneeling, crouching and/or crawling; significant reaching and dexterity of hands and fingers to operate tools and equipment. Employ the use of equipment to handle weights of up to 600 pounds with care. The job is performed under minimal temperature variations working mostly indoors, a generally hazard free environment, and in a clean atmosphere. Regular travel will be required. Under most circumstances any after-hours shift work will be performed in a secure restricted area.

MINIMUM QUALIFICATIONS

EXPERIENCE:

Four years of increasingly responsible experience in networking and/or information systems performing a variety of operations which would demonstrate exposure to and utilization of skills, knowledge, and abilities required by the position.

EDUCATION:

An Associate's degree in Computer Science, Information Science, Engineering or Mathematics from an accredited college or university is required. Alternatively, in addition to the four year minimum requirement of experience stated above, year-for-year of relevant experience in place of education may be substituted for each year of required education (*e.g., 6 years of relevant experience would satisfy both employment requirements*).

CERTIFICATES/CREDENTIALS/LICENSES: Valid California driver's license is required

PREEMPLOYMENT:

- Fingerprint clearance
- TB clearance
- Required testing
- Some positions require a cellular/mobile device for voice communication with employer
- Some offers of employment are contingent upon successful passing of a physical examination including documentation, immunizations, and/or exemption as required

SALARY SCHEDULE: 600 Range: 31