

NETWORK SPECIALIST

DEFINITION

Under general supervision, maintain ongoing availability and security of vital district network; install, configure, support, and monitor Cisco Systems routers, switches, voice, video, and security devices; support other manufacturer Local Area Network (LAN) devices, as needed; clearly communicate technical solutions in a user-friendly, professional manner; provide one-on-one, end-user training, as needed; conduct hardware and software inventory database maintenance and reporting; perform other related work as required.

ESSENTIAL FUNCTIONS

Provide administration and maintenance of LAN and Wide Area Network (WAN) system servers, applications, and equipment; assure system stability, security and maximum uptime; monitor access to system resources and track connectivity and security problems; analyze problems and implement solutions according to District procedures; perform circuit and network troubleshooting to diagnose system problems; analyze system functionality; identify, locate, and resolve complex network problems to ensure minimal disruption of critical applications; monitor and review system log reports and network documentation; resolve and repair problems within scope of authority; monitor system environment, utilization, and system log reports; resolve connectivity, performance, security, configuration and access problems; monitor system for operating efficiency, make corrective adjustments to data management settings, and assure optimum performance and system integrity; install and configure hardware, equipment, and system software applications, including remote site deployments, as required; install, configure, and update network server software upgrades, file sharing, and domain security protocols; detect and correct software errors; provide referral to Technology Services Coordinator when problems occur which are beyond the skills of the Network Specialist, and track the problem until it has been resolved; oversee design and implementation of individual solutions and ongoing maintenance and management of the network; provide resolution information and collaborate with other teams to complete impact analysis where appropriate; provide detailed solution documentation; perform other duties as assigned or required.

EMPLOYMENT STANDARDS

KNOWLEDGE AND ABILITIES

Knowledge of:

Methods of administrating and managing Cisco hardware/software;
Methods, procedures, material, and techniques used to design, configure, and install routers/switches/firewall/VPN concentrators;
Methods to resolve network problems using Cisco Works and other network tools;
Design elements and implementation strategies for new technical solutions;
Security issues with regards to networks under management, and ability to respond to those issues;
Methods and procedures to ensure that products and services meet overall security objectives;
Networked computer system environments and device capabilities;
LAN and WAN management and configuration principles;
Networks, security guidelines and industry "best practices;"
Fiber Optic, Coaxial, DS3, ATM, T1, fractional T1, and Ethernet transmission systems;
Private line, Point to Point, and frame relay WAN protocols;
Telecommunications industry and infrastructure;
Fast-paced, stressful environments;
Techniques and skills to design and evaluate telecommunications and network systems;
Techniques and skills to design and manage complex projects involving people and technology;
Techniques and skills to solve complex technical problems involving integrated operating systems and hardware platforms;

Ability to:

Identify, troubleshoot, and resolve a wide range of technical network and computer-related problems;
Identify, evaluate, and solve network problems;
Support and train end-users in a wide range of software applications as needed;
Read, understand, and apply complex technical information;
Master new computer technology;
Communicate effectively in oral and written form;
Establish and maintain an effective working relationship with those contacted in the course of work; Relate effectively with racially and ethnically diverse staff, students and community;
Coordinate and oversee maintenance and changes to the production environment;
Develop and update processes and procedures;
Work effectively with cross-functional teams to define technical requirements and identify/resolve technical issues;
Provide statistical information upon request in relation to system and security activities;
Work independently;
Implement data solutions;
Assess and prioritize multiple tasks, projects, and demands;
Operate a personal computer utilizing a variety of software applications;
Basic understanding of electrical safety procedures;
Effective telephone skills and techniques of customer service.

Skills:

In some positions where typing is less than 25% of the job function, the typing requirement may be waived at the discretion of the District administration.

EDUCATION AND EXPERIENCE

A Bachelor's Degree in Computer Science; **AND** three (3) years of computer network installation and maintenance experience; **OR** an equivalent combination of education and experience.

REQUIRED LICENSES AND/OR CERTIFICATES

Must possess one or more of the following certifications: CCNP (Cisco Certified Network Professional), or CCNA (Cisco Certified Network Associate). Other network and/or industry certifications or experience may be substituted where appropriate. This classification requires the use of a personal or District vehicle while conducting District business. Must possess a valid and appropriate California driver's license; have an acceptable driving record and qualify for insurability with the District's insurance carrier.

PHYSICAL REQUIREMENTS AND WORKING CONDITIONS

Strength:

Work may involve lifting, carrying, pushing and/or pulling of objects weighing up to 75 pounds with frequent lifting of objects that weigh up to 50 pounds; physical dexterity in limbs and digits necessary to operate hand tools and power tools used in the electronic trade; ability to bend, stoop, climb, grasp, and reach.

Working Conditions:

Must be able to sit for prolonged periods of time in front of a computer. May require a significant amount of walking during the course of the work day.

Additional Requirements:

May be required to work outside the traditional work schedule. May be called out to work off-shift in emergency situations. According to the needs of the organization, some incumbents in this job class may be required to obtain specific technical certifications.

Pre-placement Physical: Class I