SAN MATEO COUNTY OFFICE OF EDUCATION

Excellence and Equity in Education

FLSA: Non-Exempt

NETWORK ANALYST

DEFINITION

Under general supervision, performs a variety of specialized activities in the installation, configuration, operation, maintenance, and repair of assigned network systems, servers and related equipment, hardware, software and applications; administers, evaluates and modifies network systems to ensure proper security and operation; and performs related duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned supervisory or management personnel. Exercises no direct supervision over staff.

CLASS CHARACTERISTICS

This journey-level technical classification is responsible for independently performing technical duties in support of the Office's network systems, servers, and related equipment and software. Positions at this level exercise judgment and initiative in their assigned tasks, receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Installs, configures, operates, maintains, and repairs assigned Local Area Network (LAN), Wide Area Network (WAN), Wi-Fi, and other network systems, servers and related equipment, hardware, software and applications; monitors and evaluates network performance to assure smooth and efficient operation and identify problems, concerns and security issues.
- Inspects, monitors, troubleshoots and diagnoses network system and data traffic, server, hardware and application malfunctions to assure smooth running of network systems; resolves network problems and malfunctions; administers, configures, monitors and maintains network system servers and security; updates servers with security patches and anti-virus software as needed.
- Provides for the effective and efficient storage, retrieval, customization and archiving of data on servers; troubleshoots and resolves network and server-related database problems and malfunctions; assures data integrity; prepares, maintains and replaces back-up data files; monitors available system disk space; moves, compresses and deletes files to provide for program running as needed.
- Installs server and workstation software; tests applications to assure proper operation; configures hardware and software to assure network access and smooth system operations; troubleshoots and resolves operating system malfunctions; obtains and installs software updates and upgrades as needed.
- Performs network administration activities including establishing and maintaining active directory

user accounts, passwords, e-mail and VOIP accounts, internet connectivity, VPN accounts, firewalls and designated programs and systems; assesses and responds to requests for network system and server installations, upgrades and modifications; determines appropriate hardware and software to meet requests.

- Assists in the planning, design, set-up, development and modification of server and network systems; installs and configure network hardware, cabling, servers, routers, switches, printers, and related equipment; replace cabling, equipment and devices as necessary; assure proper installation of server software and test applications to assure proper operation.
- Communicates with personnel, administrators and various outside agencies to exchange information and resolve issues or concerns; contacts and collaborates with vendors in resolving network problems, issues and malfunctions.
- Maintains various records related to network documentation, routers, switches, firewall configurations, IP's and assigned activities; documents service tickets in a timely manner to provide sufficient information to communicate the problem, how it was remediated, and suggested actions to prevent recurrence as appropriate.
- Stays abreast of current trends and developments in information technology programs and services; confers with users concerning system needs; provides recommendations concerning the purchasing and implementation of new technologies including network hardware and software.
- Observes and complies with all Office and mandated safety rules, regulations, and protocols.
- Performs related duties as required.

QUALIFICATIONS

Education and Experience:
Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

- Equivalent to completion of the twelfth (12th) grade supplemented by college level coursework in computer science or a related field; and

- Two (2) years of experience performing network systems and server support duties, including working with LAN and VOIP networks.

Licenses and Certifications:
This position may require employees to travel locally, and specifically, employees must be able get themselves to different locations during their workday. Employees will be responsible for ensuring that they can timely move between locations during their workday either via driving themselves with a valid driver's license or using other modes of transportation, including a ride hailing service, taking a taxi, carpooling, bicycling, etc.

Knowledge of:

- Practices, procedures and techniques involved in troubleshooting, diagnosing, and resolving network systems, servers and related equipment, hardware, software and applications issues.
- Operational characteristics of desktop, network, and telecommunication systems hardware, software, and peripheral equipment.
- Methods and techniques of installing, configuring, administering, and monitoring a diverse range of physical and virtual systems.
- Materials, methods and tools used in the operation, installation and repair of computer and network

systems.
- LAN/WAN and Wi-Fi network usage, implementation and network terminology.
- General principles, theories and techniques of network design.
- Applicable types of cabling systems, servers, switches, routers and other related equipment.
- Installation, maintenance and repair of server hardware, software and peripheral equipment.
- Cybersecurity best practices.
- Computer operating systems and software applications utilized by SMCOE.
- Principles and practices of developing and maintaining technical documentation, files, and records.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and Office staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Administer, evaluate and modify network systems to assure proper security and operation.
- Troubleshoot, diagnose and resolve problems with network servers and related equipment, hardware, software, and applications.
- Assist in the planning, design, installation, configuration and modification of LAN/WAN and Wi-Fi networks.
- Install and assure proper operation of server and workstation software and updates.
- Perform a variety of network administration activities including establishing and maintaining user accounts, passwords, server and system back-ups, e-mail accounts, VOIP, VPN, and internet connectivity.
- Repair and replace hardware as needed.
- Monitor and maintain network system security, servers and databases.
- Provide for effective and efficient storage, retrieval, customization, and archiving of data.
- Install and configure network hardware, cabling and related equipment.
- Maintain records and prepare reports.
- Respond to and effectively prioritize a high volume of phone calls and other requests for service.
- Use tact, initiative, prudence, and independent judgment within general policy and procedural guidelines.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and visit various Office sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. This is primarily a sedentary office classification although standing in work areas and walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer

keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects up to 50 pounds.

ENVIRONMENTAL CONDITIONS

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing divisional policies and procedures.