

SAN MATEO COUNTY OFFICE OF EDUCATION

CLASS TITLE: SENIOR NETWORK ANALYST

BASIC FUNCTION:

Under the direction of the Manager, Network Services, perform a variety of specialized activities involved in the installation, configuration, operation, maintenance and repair of County Office and school district Local Area Network (LAN) and Wide Area Network (WAN) systems, servers and related equipment, hardware, software and applications; administer, evaluate, modify and assure proper security and operation of County Office network systems.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

Perform a variety of specialized activities involved in the installation, configuration, operation, maintenance and repair of County Office and school district LAN and WAN systems, servers and related equipment, hardware, software and applications; administer remote and internal networks to facilitate access to system resources.

Inspect, troubleshoot and diagnose network system, server, hardware and application malfunctions to assure smooth running of network systems; resolve connectivity and other network problems and malfunctions; administer, configure, monitor and maintain network system servers and security; update servers with security patches and anti-virus software as needed.

Monitor and analyze network performance to assure smooth and efficient operation and identify problems, concerns and security issues; assure proper network usage, operations, resources allocation, bandwidth and connectivity; monitor, analyze and modify systems to meet County Office, remote and dial-up user needs.

Provide technical assistance and user support to County Office personnel, school districts, outside agencies and others concerning networks; respond to inquiries and provide detailed and technical information concerning network design, equipment, hardware, software, security, connectivity, configuration, malfunctions, applications, practices, techniques and procedures.

Assist in the planning, design, set-up, development and modification of computer and network systems; assist in the development and implementation of related projects; assist in preparing and development network plans including diagrams, drawings, spreadsheets and other documents; contact vendors to request pricing information for network hardware and software as directed.

Install and configure network hardware, cabling, servers, hubs, routers, printers, switches, modems, interface cards, data jacks and related equipment; replace cabling, equipment and devices as necessary; assure proper installation of server and work station software and test applications to assure proper operation.

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Perform a variety of network administration activities including establishing and maintaining user accounts, passwords, e-mail accounts, internet connectivity, firewalls and designated programs and systems; analyze and respond to requests for network system and server installations, upgrades and modifications; determine appropriate hardware and software to meet requests.

Install server and work station software; test applications to assure proper operation; configure hardware and software to assure network access and smooth system operations; troubleshoot and resolve operating system malfunctions; obtain and install software updates and upgrades as needed.

Provide for the effective and efficient storage, retrieval, customization and archiving of data on servers; troubleshoot and resolve network and server-related database problems and malfunctions; assure data integrity; prepare, maintain and replace back-up data files; monitor available system disk space; move, compress and delete files to provide for program running as needed.

Prepare user stations and computer equipment for staff use; install and configure software and hardware and observe elements of the computer for evidence of incorrect performance; connect work stations to network server and assure proper operation; troubleshoot, diagnose and repair computer workstations and related hardware and software as needed.

Communicate with personnel, administrators and various outside agencies to exchange information and resolve issues or concerns; contact and collaborate with vendors in resolving network problems, issues and malfunctions.

Operate a variety of computers, servers, peripherals, testers, meters, tone generators, specialized software and hand tools; drive a vehicle to conduct work.

Maintain various records related to network documentation, routers, switches, firewall configurations, IP's and assigned activities.

Research and evaluate new technologies for possible implementation; confer with users concerning system needs; provide recommendations concerning the purchasing and implementation of new technologies including network hardware and software.

OTHER DUTIES:

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Practices, procedures and techniques involved in the installation, configuration, operation, maintenance and repair of network systems, servers and related equipment, hardware, software and applications.
Principles, methods and procedures of operating computers, networks and peripheral equipment.

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System utilities and design and program applications.

Materials, methods and tools used in the operation, installation and repair of computer and network systems.

WAN and LAN usage, implementation and network terminology.

Principles, theories and techniques of network design.

Applicable types of cabling systems, servers, hubs, routers and other related equipment.

Installation, maintenance and repair of computer hardware, software and peripheral equipment.

Principles and techniques of systems and network analysis.

Computer operating systems and software applications utilized by the County Office.

Record-keeping and report preparation techniques.

Interpersonal skills using tact, patience and courtesy.

Oral and written communication skills.

Technical aspects of field of specialty.

ABILITY TO:

Perform a variety of specialized activities involved in the installation, configuration, operation, maintenance and repair of County Office and school district LAN and WAN systems, servers and related equipment, hardware, software and applications.

Administer, evaluate and modify network systems to assure proper security and operation.

Monitor, analyze and modify systems to meet County Office, remote and dial-up user needs. Troubleshoot, diagnose and resolve problems with network servers, hardware and software.

Assist in the planning, design, installation, configuration and modification of WANS and LANs.

Install and assure proper operation of server and work station 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 and internet connectivity.

Repair and replace hardware as needed.

Administer, monitor and maintain network system security, servers and databases.

Provide for effective and efficient storage, retrieval, customization and archiving of data.

Configure network and user station settings to assure optimal utilization of system resources.

Install and configure network hardware, cabling and related equipment.

Plan and organize work.

Meet schedules and time lines.

Work independently with little direction.

Maintain records and prepare reports.

Communicate effectively both orally and in writing.

Establish and maintain cooperative and effective working relationships with others.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree in computer science or related field and three years experience involving the installation, maintenance and repair of network systems and related servers, equipment, hardware and software.

LICENSES AND OTHER REQUIREMENTS:

Valid California driver's license.

WORKING CONDITIONS:

ENVIRONMENT:

Indoor work environment.

Driving a vehicle to conduct work.

PHYSICAL DEMANDS:

Dexterity of hands and fingers to operate a computer keyboard.

Hearing and speaking to exchange information.

Seeing to read a variety of materials and view a computer monitor.

Sitting or standing for extended periods of time.

Lifting, carrying, pushing or pulling moderately heavy objects as assigned by the position.

Bending at the waist, kneeling or crouching.

Reaching overhead, above the shoulders and horizontally.