NETWORK SERVICES ANALYST

BASIC FUNCTION:
Under the direction of the Director of Network and Information Technology or assigned supervisor, perform a variety of advanced and specialized technical duties in the implementation, configuration, upkeep, investigation, maintenance and operation of local area networks (LANs) and wide area networks (WANs) for the county office and school districts in the Fresno County region; provide design and planning for local and wide-area networking strategies for the county office and school districts.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:
• Operate as tier three network support in a three-tiered system, with tier three support being the highest level.
• Investigate and resolve network system hardware, cabling and related equipment and issues to ensure proper operation.
• Implement, configure, upgrade, investigate, maintain and repair a variety of LAN and WAN networking technologies and equipment including but not limited to routers, switches, firewalls and servers from various manufacturers.
• Assess network performance and identify problems, issues or concerns.
• Assist and train Network Services Specialist on various networking solutions, applications, equipment and technologies.
• Conduct advanced diagnostic, investigation and testing on networking and computing configurations as needed.
• Create and track progress on problems in a problem management solution.
• Create, modify and maintain a variety of graphical documents and diagrams representing LAN and WAN topology information.
• Create, modify and maintain a variety of records related to work activity, systems, servers, databases, software applications, networks, inventory, repairs and assigned activities.
• Create, plan, manage and update projects in a project management solution.
• Implement, configure and maintain security for networking, computing technologies and equipment.
• Monitor the work order system for tier three service, incident and escalation requests, including but not limited to the following categories: Network Support, District Support, Phone\Fax Support.
• Move furniture and equipment as needed.
• Participate in advanced level design of WANs and LANs to meet county office and school district technology needs.
• Perform a variety of advanced and specialized technical duties in the implementation, configuration, upkeep, investigation, maintenance and operation of Local Area Networks (LANs) and Wide Area Networks (WANs) for the county office and school districts in Fresno County.
• Perform advanced implementation, configuration and maintenance of various manufacturers' equipment and operating systems including routers, firewalls, next generation firewalls, switches, VOIP and servers.
• Provide advanced design and planning for local and wide-area networking strategies for the county office and school districts in Fresno County.
• Provide advanced technical expertise in the implementation, configuration, planning, maintenance and repair of WAN technologies including routers, protocols, operating systems, hardware, cabling and any other dependent technology.
• Provide tier three support in implementing, configuring, investigating, and maintaining VOIP telephony systems.
• Research, test and evaluate new networking technologies, software, equipment and applications for possible purchase and implementation.
• Serve as a senior networking resource for the county office and school districts.
• Stay up to date with trends, innovations and practices in networking technology including hardware and software.
• Track all infrastructure changes in a change management solution.
• Work on high level networking technology projects directly affecting the organization and Fresno County school districts.
• Attend and participate in a variety of assigned meetings, committees, conferences, inservices and/or special events.
• Comply with schedules, policies, regulations, procedures, orders and directives of the County Superintendent.
• Exhibit professionally appropriate interpersonal skills including but not limited to tact, patience, flexibility and courtesy.
• Maintain a safe work environment.
• Operate a variety of office equipment, including but not limited to a computer and assigned software applications.
• Serve as a liaison between County Superintendent and administrators, personnel, outside organizations or the public concerning assigned area.
• Serve as a technical resource concerning assigned program, function or instructional area.
• Work collaboratively with assigned supervisor and team members to ensure the effective and efficient operation of the assigned program.

OTHER DUTIES:
• Assist team members as needed and/or assigned.
• Drive a vehicle to conduct work, using own transportation.
• Move furniture and equipment as needed.
• Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:
• A variety of computer networking technologies, systems and languages.
• Advanced installation, design, configuration and operation of Palo Alto Next Generation Firewall.
• Advanced principles, methods, materials, tools and procedures involved in the implementation, configuration, maintenance, repair, modification and operation of WANs, LANs and related equipment.
• Advanced configuration of various Cisco equipment and operating systems including routers, firewalls, switches, VOIP and servers.
• Advanced design principles, theories and techniques of LANs and WANs.
• Advanced inter-network and intra-network design and analysis.
• Current technological developments/trends in area of expertise.
• Hardware/software maintenance and support.
• Microsoft Office suite including but not limited to Word, Excel, Access, PowerPoint and Outlook.
• Networking monitoring applications.
• Principles of training and providing work direction.
• Processes for data circuit deployment and provisioning.
• Routers, firewalls, next generation firewalls, switches and UNIX/Linux systems.
• Routing protocols such as OSPF, EIGRP, IS-IS, and BGP.
• Technical report writing.
• Telecommunication technology, multimedia applications, and distance learning concepts and hardware.
• Various operating systems including but not limited to UNIX, Linux, Macintosh, and Windows.
• Proper English usage, grammar, spelling, punctuation and vocabulary in all forms of communication.
• State Education Code, local, state and federal laws, codes, regulations and requirements and county office organization, operations, policies and objectives as related to assigned activities and/or instructional area.
• Theoretical and technical aspects of field of specialty.

ABILITY TO:
• Manage individual calendar and effectively meet schedules and timelines.
• Maintain various daily records and graphical documentation.
• Operate a variety of hand and power tools, technical equipment, testers, meters, and equipment utilized in the maintenance and repair of network systems.
• Order and receive parts and equipment as appropriate.
• Prepare and present network administration training sessions to lay and professional audiences.
• Analyze and evaluate situations accurately and adopt an effective course of action.
• Communicate effectively both orally and in writing.
• Drive a vehicle to conduct work.
• Interpret, apply, and explain rules, regulations, policies and procedures.
• Maintain consistent, reasonably regular, punctual attendance consistent with federal, state and local standards.
• Safely and successfully perform essential job functions consistent with federal, state and local standards, including meeting qualitative and/or quantitative productivity standards.
• Work confidentially and with discretion.
• Work independently with little direction.

EDUCATION AND EXPERIENCE:

EDUCATION:
• High School Diploma, General Education Degree (GED) or State High School Proficiency certificate.
• Bachelor’s Degree in Computer Science or related field preferred.

EXPERIENCE:
• Four years progressively responsible experience with LAN and WAN installation, configuration, design and management of networks including experience with network routing preferred.

LICENSES AND OTHER REQUIREMENTS:
• Valid California driver’s license; when driving for work, maintain automobile liability insurance in accordance with California Insurance Code section 11580.1 or maintain other statutorily authorized financial responsibility.
• Enrollment in the California Department of Motor Vehicles Government Employer Pull Notice Program at time of hire and throughout employment with County Superintendent.
• This position requires a pre-placement medical assessment (paid for by FCSS) at a clinic selected by the county office. Any offer of employment is contingent upon successful certification by designated physician that applicant is able to perform essential functions of the job, with or without reasonable accommodations.

WORKING CONDITIONS:

ENVIRONMENT:
• Drive a vehicle to conduct work, using own transportation.
• Office and/or school facility environment.
• Regular interruptions.
• Small and large group meetings.

PHYSICAL DEMANDS:
• Bending at the waist, kneeling or crouching; climb or balance.
• Eyesight corrected or uncorrected sufficient to read a variety of materials including but not limited to fine print.
• Hearing with or without use of hearing aid(s) sufficient to hear any conversation with others; understandable voice and speech patterns.
• Manual dexterity and coordination sufficient to operate office and/or classroom equipment.
• Sitting, standing and/or walking for extended periods of time.
• Use hands to handle and/or feel; reach with hands and arms.
• Must frequently lift, push, pull or carry up to ten (10) pounds and occasionally lift and/or move up to fifty (50) pounds.

The physical demands and working conditions described here are representative of those that must be met by an employee to successfully perform the essential functions of this position, subject to reasonable accommodation.

This position description may not be an exhaustive list of all duties, knowledge, or abilities associated with this classification, however it is intended to accurately reflect the principal job elements. Related duties, knowledge, or abilities to those expressly stated may also be required for successful performance of the position.

APPROVED:
Effective: July 1, 2004
Revised: April 3, 2014
Revised: October 1, 2017