## MAJOR FUNCTION

This is professional, supervisory and technical work in defining, developing, maintaining and advising staff to enable the effective, safe and efficient use of the City's information technology architecture and infrastructure. Work includes system and network management activities, software and hardware installation, configuration, integration, security and support. The incumbent analyzes and resolves network hardware and software problems in a timely and accurate fashion, and consults with end-users, as necessary. An employee in this class exercises considerable independence in determining work methods and procedures. Work is performed under the general direction of the Network Administrator, who reviews the work through observation, conferences, reports, and by results obtained.

## ESSENTIAL AND OTHER IMPORTANT JOB DUTIES

Essential Duties
Consults with designated staff in City departments to assess near-term and long-term network capacity needs. Designs, configures, deploys and maintains the City's local and wide area networks (LANs, WANs), including servers, routers, hubs, switches, firewalls, wireless technology and other associated hardware to ensure safe and reliable operation for fulfilling business objectives and processes. Installs, configures, integrates and supports software and hardware. Monitors network performance and troubleshoots problem areas as needed. Responds to customer service requests and performs analysis to determine problems and recommends resolution and when necessary, repairs, moves/changes and adds new services. Performs management activities for existing hardware, systems and networks by creating and maintaining documentation, as it relates to network configuration, mapping, processes, security and service records. Monitors and tests network performance and ensures network connectivity of all servers, workstations, and other network appliances. Participates in managing all network security solutions. Manage servers, including database, e-mail, print, and backup servers and their associated operating systems and software. Performs server and security audits, and system backups and recovery. Meets with City staff and vendors to discuss and recommend solutions to application needs. Evaluates findings and makes recommendations that direct the customer's course of action. Makes arrangements for the installation, configuration, maintenance, and troubleshooting of end user workstation hardware, software, and peripheral devices. Serves as a member of project teams for new technology awareness, research and system integration. Develops, implements and maintains policies, procedures, and associated protocol for network administration, usage, and disaster recovery. Recommends the hiring, transfer, promotion, grievance adjustment, discipline and discharge of employees. Conducts performance evaluations and recommends approval or denial of merit increases. Performs related work as required.

Other Important Duties
Conducts research on network products, services, protocols, and standards to remain abreast of developments in the networking industry. Evaluates and recommends new technology as the need arises. Serves as a resource to other ISS staff regarding primary areas of responsibility. Performs related work as required.

## DESIRABLE QUALIFICATIONS

Considerable knowledge of local and wide area network technologies and concepts, including Internet protocol routing and topologies, switching technologies, virtual LANs, etc. Considerable knowledge of Voice over IP concepts. Knowledge of network equipment and operating systems, including configuration of routers, switches and wireless networks and services such as Dynamic Host Configuration Protocol (DHCP) and Digital Network Services (DNS). Knowledge of Active Directory service (ADS) and personal computer operating systems. Knowledge of network security protocols

and methodologies that extends beyond the use of basic security tools. Ability to isolate, define and resolve failed equipment in the City's network systems. Ability to design, configure and support complex WANs. Ability to troubleshoot hardware and software system problems. Ability to interpret and work from technical manuals, diagrams, sketches, or blueprints. Ability to learn and support new network components. Ability to understand and effectively carry out oral and written instructions. Ability to establish and maintain effective work relationships with customers and other City departments. Ability to express ideas clearly and concisely, orally and in writing. Skill in the use of network management products and the tools and equipment necessary for successful job performance.

Minimum Training and Experience
Possession of a bachelor's degree in computer science, mathematics, engineering, business or public administration, or a related field and three years of professional and technical experience that includes implementing and supporting data communications networks and operating systems software and hardware; or an equivalent combination of training and experience.

Necessary Special Requirement
Must possess a valid Class E State driver's license at the time of appointment.


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