NETWORK ADMINISTRATOR I

NATURE OF WORK

This is responsible technical work directing and controlling the networking hardware, software systems, and physical plant spaces and pathways used to support the City and County enterprise networking systems.

Work involves responsibility for installing and troubleshooting networking software, hardware and physical plant connectivity; configuring and managing hardware including routers, switches and software components; responding to and, where appropriate, resolving or escalating reported security incidents; providing technical assistance to City and County customers in the use of networking services; monitoring network performance, reliability and scalability; evaluating network product and services behaviors; troubleshooting and resolving network, connectivity and security problems; identifying, developing and implementing performance improvement features and procedures. An employee in this classification is expected to exercise independent judgment and personal initiative in the performance of assigned duties. General supervision is received from the Network Supervisor, Fiber Network and Right of Way Manager or the Information Security Officer.

EXAMPLES OF WORK PERFORMED

Provides technical assistance to customers in the use of networking systems and unique networking applications.

Installs and configures networking hardware; performs hardware and software upgrades to existing systems.

Configures and manages network hardware including routers and switches as well as software components in order to ensure maximum network performance; reviews network alerts and statistics; provides preventive and corrective action as required.

Creates, reviews, documents, and inspects physical plant spaces and pathways, identifies and reviews required permits related to network infrastructure.

Acts as liaison between customers, vendors and Information Services; investigates reported problems in order to determine general responsibility; diagnoses problems with routers and ethernet network equipment.

Reviews, directs, and advises on Domain Name Service (DNS), Dynamic Host Configuration Protocol (DHCP), and Local/Wide Area Networks (LAN/WAN) configurations and documentation.

Monitors and maintains network security devices including Firewalls, Spam Filters, Intrusion Detection Systems, Intrusion Prevention Systems, Virtual Private Networks, and Remote Access Services.

Develops procedure, configuration and documentation specifications for networking hardware and software.

Posts knowledge bases and frequently asked question (FAQ) resources on the City Information Services service portal.

Performs related work as required.

DESIRABLE KNOWLEDGE, ABILITIES AND SKILLS

Knowledge of computer hardware and associated networking equipment.

Knowledge of ethernet networks and ability to analyze the same using appropriate network analyzing tools.

Knowledge of routers, switches and network operating system.

Knowledge of physical plant spaces and pathways and troubleshooting of these systems; including earthing, grounding, and bonding of such systems.

Ability to communicate effectively both orally and in writing.

Ability to establish and maintain effective working relationships with contractors, coworkers, customers and the general public.

Ability to exercise independent judgment and initiative in analyzing network systems and to make sound recommendations and modifications.

Ability to manage multiple responsibilities concurrently.

MINIMUM QUALIFICATIONS

Associate degree with major coursework in computer science, network administration, or related field and five years of experience in the installation and maintenance of networking/data communications systems; or any equivalent combination of training and experience that provides the desirable knowledge, abilities and skills.

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