CITY OF FONTANA
(IT) NETWORK ADMINISTRATOR

DEFINITION: Under general direction, performs work involved in the analysis, design, modification, implementation and maintenance of the City's Communication Network; performs related duties as required. Designs, configures, maintains and administers network resources in a LAN/WAN environment, including wireless.

CHARACTERISTICS OF POSITION: This position is characterized by its responsibility for the analysis, planning and implementation of all components of the City's voice, data and wireless communications system. Additionally, incumbents in this position act as backup for the Systems Administrator.

ESSENTIAL FUNCTIONS: The incumbent must have the ability to:
- Analyze current and historical service levels, traffic patterns and feature usage, and recommend and implement software changes/upgrades to maximize efficiency.
- Project and utilize user needs and developments in the telecommunications industry and develop means of accommodating future systems demands.
- Compare comparative and cost analyses of systems expansions and enhancements; formulate short and long-term plans; design network topology and develop specifications and work with contractors to implement same.
- Evaluate the cable plant and recommend strategies for optimizing existing lines without major plant expansion.
- Study overall router, switch and wireless alarm patterns and determine methods for averting patterned outages.
- Evaluate system reports and develop cost effective recommendations to improve service delivery and system reliability.
- Maintain and examine network history logs and alters network operations modes for the purpose of conducting performance studies.
- Plan strategic and tactical disaster recovery survival scenarios based on different threat levels.
- Ensure that adequate replacement parts are kept in network equipment inventory for repairs and anticipated changes.
- Develop and control security mechanisms to ensure against unauthorized access to the network and control equipment.
- Maintain records and prepare and submit reports and correspondence as required by immediate supervisor.
- Provide vacation and temporary relief as necessary.
- Install, configure and maintain network and network infrastructure; develop shell/utility scripts, monitor security, update system documentation.
- Diagnose and resolve application and/or LAN connectivity problems and system hardware conflicts.
- Provide/coordinate user support and training in the use of soft/hardware.
- Support applications and their usage through the use of query/reporting tools, by coding interfaces/scripts/patches, installing packaged updates and maintaining directories.

- Plan, design and set up LAN/WAN components to meet connectivity requirements and reduce duplication.
- Monitor/maintain the network infrastructure; evaluate hardware and bandwidth use, traffic pattern and volume analysis; tailor/tune for optimal performance.
- Research, select and purchase hardware, software and training services to meet business needs.
- Perform DBMS backup, recovery, tuning and monitor data integrity.
- Develop and maintain system security and firewall requirements based on City standards and department needs.

THE ABOVE LIST OF ESSENTIAL FUNCTIONS IS NOT EXHAUSTIVE AND MAY BE SUPPLEMENTED AS NECESSARY BY THE EMPLOYER.

WORKING CONDITIONS: Position requires frequent standing and walking, sitting for extended periods; normal manual dexterity and eye/hand coordination; lift and move objects weighing up to twenty-five pounds; corrected hearing and vision to normal range as well as verbal communication; use of office equipment including telephone, computer, calculator, copiers and fax. Work is normally performed in an office with moderate to constant noise; frequent contact with other staff and the public is required.

EDUCATION AND EXPERIENCE: A minimum of three years experience in Network Administration and Design and CISCO, two years experience with Win 2000/NT and or UNIX server environments, one year experience with Novell systems administration and a Bachelor's Degree from an accredited college or university with major coursework in Computer Science or a closely related field.

LICENSES/CERTIFICATES: Possession of, and continuously throughout employment, a valid CA Class "C" Driver's License.