CARROLLTON
TEXAS

DATE	January 2020
JOB CODE	
FLSA	EXEMPT
EEO	

JOB TITLE: Network Operations Architect
DEPARTMENT/DIVISION: Information Systems
REPORTS TO: Infrastructure Manager

SUMMARY: Responsible for the design, management, optimization and high-level support of the electronic data network. This position will also be responsible for acting as a technical consultant to internal staff and outside vendors in order to plan and install network and related equipment and cabling systems to satisfy business needs.

ESSENTIAL JOB FUNCTIONS:
- Develop administrative directives, general orders, and standard operating procedures for the enterprise.
- Build and maintain strong, effective working relationships with internal support teams, peers, vendors and customers as it deals with the City's technical infrastructure. Develop, coordinate and implement the objectives of the department including performance measures and service improvements.
- Provides leadership in the installation, management, upgrade, migration, and enhancement of technology products in the City's environment.
- Install and administer network infrastructure in coordination with IT personnel or outside vendors.
- Monitor and maintain network performance and capacity after modifications and updates. Monitor and analyze log data.
- Investigate, resolve, and analyze problems with performance and response time for network infrastructure.
- Investigate, resolve, and analyze network outages and prepare analysis and remediation plans.
- Provide solutions that will accommodate emerging technologies and future capacity needs.
- Determine future capacity requirements and prepare budgetary documentation for future requests.
- Participate in needs-analysis and requirements definitions with other City personnel to determine project scope.
- Assess user needs in order to perform necessary upgrades to hardware and software.
- Consult with service providers on leased line and wide area communications projects.
- Maintain network security through securing the network infrastructure from physical and electronic threats.
- Provide training to lower level staff.
- Maintain compliance with external regulatory controls, such as the Texas Department of Information Resources.

- Participates in a variety of special projects in support of departmental operations, which may include analyzing vendor contracts; performing special studies; providing guidance and recommendations to departments to ensure organizational sustainability and maximize organizational efficiency, effectiveness, and performance; recommending cost-conscious decisions and actions; and/or, performing other related activities.
- Performs other duties as assigned, which may involve irregular work hours, including evenings and weekends.

KNOWLEDGE, SKILLS, AND ABILITIES:
- Knowledge of network protocols including TCP/IP, VLAN, BGP, EIGRP, OSPF, 802.1x
- Knowledge of acquisition and installation of network security software and ability to conduct intrusion testing
- Knowledge of the major components of network and server infrastructure - hardware, software, cabling systems
- Knowledge of Microsoft Windows desktop and server operating systems
- Knowledge of strategic planning principles
- Knowledge of process improvement principles and practices
- Knowledge of disaster and business recovery practices
- Knowledge of government operations and processes
- Skilled in managing projects
- Skilled in developing performance metrics
- Skilled in designing secure networks, systems, and applications architecture
- Skilled in evaluating quality and reviewing final work products
- Skilled in analyzing security processes
- Skilled in assessing cost efficiency and effectiveness of municipal operations
- Skilled in tracking service call and installations
- Skilled in identifying and solving problems
- Skilled in documenting service outages and resolutions
- Skilled in working independently or part of a team in delivering excellent customer service
- Skilled in reading and interpreting technical documents
- Skilled in applying independent judgment, personal discretion, and resourcefulness in interpreting and applying guidelines
- Skilled in reading, interpreting, applying, authoring and explaining rules, regulations, policies, and procedures
- Skilled in preparing clear and concise reports
- Skilled in gathering and analyzing information and making recommendations based on findings and in support of organizational goals
- Skilled in operating a computer and related software applications
- Skilled in communicating effectively with a variety of individuals
- Ability to install, configure and manage Cisco Routers and Switches
- Ability to install, configure and manage fiber channel infrastructure
- Ability to manage and monitor vendor hardware and software network acquisitions
- Ability to communicate with users to define system requirements and resolve problems

- Ability to analyze technical problems and develop workable solutions

MINIMUM QUALIFICATIONS:
- Bachelor's Degree in Business, Information Technology, Computer Science or related field of study
- 7 years progressive experience in a Microsoft Windows environment with 5 or more physical locations, 1,000 or more users and 150 or more servers
- 7 years of experience with Cisco and F5 technologies
- Must qualify for and maintain compliance with Criminal Justice Information Systems access requirements
- Must possess or be able to obtain and maintain a valid Texas driver's license

PREFERENCES:
- 7-9 of experience installing, managing and optimizing LAN and WAN networks in a Microsoft Windows environment with five or more physical locations, 1,000 or more users and 150 or more servers
- Hold one or more of the following certifications;
    - Cisco Certified Network Associate
    - Cisco Certified Network Professional
    - Cisco Certified Voice Professional
    - CCIE Storage Networking
    - Microsoft Certified Systems Engineer (MCSE)
    - Microsoft Certified Systems Administrator (MCSA)

WORKING CONDITIONS:
- Frequent reaching, sitting, talking, seeing, hearing, and manual dexterity
- Occasional climbing, balancing, stooping, kneeling, and crouching
- Sedentary office and outdoors work environments
- Occasional lifting and carrying up to 50 pounds
- Work may be performed in a data-center environment, involving loud noise and temperature irregularity
- Work both indoors and outdoors and are exposed to cold and hot temperatures, constant noise, fume/odor hazards, road hazards, heights, and mechanical and electrical hazards.

CONDITIONS OF EMPLOYMENT:
- Must pass pre-employment drug test.
- Must pass criminal history check.
- Must pass motor vehicle records check.