NETWORK SPECIALIST

Definition:

Under general supervision performs specialized technical and professional work in the analyses, design, configuration, implementation and modification of the City's internal local area network (LAN) and wide area network (WAN) including the wireless communications system; makes recommendations regarding related upgrades and develops/maintains security and firewall systems and performs related work as required.

Essential Duties and Responsibilities:

The responsibilities and essential duties performed on a frequent and recurring basis by an incumbent include the following:

Analyzes current and historical Information Technology (IT) service levels, traffic patterns and feature usage; makes recommendations and implements related changes.

Develops and maintains the IT security system including firewall requirements based on City standards and department needs.

Installs, configures and maintains the network and network infrastructure, develops shell/utility scripts and updates system documentation.

Monitors/maintains the network infrastructure; evaluates hardware and bandwidth use.

Performs network volume analysis and tunes the network for optimal performance.

Diagnoses and resolves application and/or LAN connectivity problems and system hardware conflicts.

Performs data base management system (DBMS) backup, recovery, tuning, installation, maintenance and monitors data integrity.

Performs comprehensive system and network capacity analysis and planning.

Performs applicable Windows and Linux system administration tasks including backup, recovery, tuning, maintenance and installation.

Plans, designs and sets up LAN/WAN components to meet connectivity requirements and reduce duplication.

Monitors the work of staff as assigned and provides support to the IT Manager as needed.

Supports applications and their usage via query/reporting tools, coding interfaces/ scripts/patches and installs packaged updates and maintains directories.

Performs a variety of other related tasks including maintaining directories, obtaining data from departments, writing software programs and performing backup and recovery tasks.

Researches and recommends hardware, software and training services to meet City needs and provides and/or coordinates user support and training.

Attends meetings with consultants, City staff and outside sources to meet project requirements and resolve concerns/conflicts.

Makes oral and written reports and prepares related material and statistical data.

Participates in and/or provides training to others related to the City's IT equipment and software.

Operates IT related and other computer equipment and applies a wide variety of software.

Lifts and moves boxes of records and other items weighing 30 pounds or less.

Other Duties and Responsibilities:

Performs other projects/tasks as assigned.

Drives a vehicle on City business.

Class Characteristics:

Network Specialist is a single incumbent professional/technical position in the Information Technology Division of the Administrative Services Department with duties related to the support of the City's MIS functions. The incumbent works independently on technical assignments, may provide direction to others and acts as backup for the Information Technology Manager.

Contacts and Relationships:

The Network Specialist establishes and maintains contact with staff in the Administrative Services Department and staff in other City departments. Some contact will occur with department heads. Additional contact will occur with vendors/consultants/contractors and other public agencies.

Qualification Guidelines:

The knowledge and abilities which are required to perform the duties and responsibilities of this class are as follows:

Knowledge of:

Operations, services and activities of information system program support.

Basic operational characteristics of a variety of computer systems, applications, hardware, software and peripheral equipment.

MIS related safety and firewall development and maintenance.

A variety of common operating systems, database platforms and programming languages including programming methods and techniques.

General maintenance of information technology equipment.

Methods of research, analysis and report writing as they relate to area assigned.

English usage, spelling and grammar.

Basic instructional and staff direction techniques.

AND

Ability to:

Analyze, design, program, install and maintain software programs.

Troubleshoot system and application problems.

Operate information technology and related equipment and use a wide variety of related software.

Perform a variety of information technology related tasks and activities including trouble shooting system and application problems, data input and document generation.

Understand and carry out oral and written instructions independently.

Read, interpret and apply complex technical publications, manuals and other material and research, compile and analyze a variety of related materials.

Handle multiple deadlines and multiple projects.

Use independent judgment and initiative.

Communicate effectively orally and in writing.

Establish and maintain effective relationships with those contacted in the course of work.

Provide direction/training to others as and monitor activities and tasks as assigned.

A typical way to obtain the knowledge and abilities is as follows:

Education:

Bachelors Degree from an accredited college or university with substantial course work (or other training) in Computer Science, Management Information Systems or a closely related field.

AND

Experience:

Three years of increasingly responsible network administration/design and Cisco experience to include one year of experience with Linux and two years of experience working with Windows 2002/2003.

Special Requirements Include:

Valid and appropriate California Drivers License and acceptable driving record at time of appointment and throughout employment in this position.

The City of Fullerton's Conflict of Interest Code requires that the Network Specialist file financial disclosure statements in accordance with state and local laws.

Must be able to work a flexible schedule to accommodate City needs and be available for emergency and non-emergency call back.

Physical Tasks and Working Conditions Include the Following:

Work is performed indoors in an office environment. The incumbent sits for extended periods of time, operates a computer, screen and related equipment, stands, walks, reaches, bends, kneels, twists, bends, grasps, lifts and moves boxes of records and other items weighing 30 pounds or less and may crawl or crouch and drive a vehicle on City business. The incumbent must be able to meet the physical requirements of the class and have mobility, balance, coordination, vision, hearing and dexterity levels appropriate to the duties to be performed.

Fair Labor Standards Act Designation: Exempt – Special Exemption for Computer Software Employees.

Established July 2005