



Class Code: 840
FLSA: Exempt

IT SENIOR SYSTEMS ANALYST

General Purpose

The Senior Systems Analyst designs and develops IT, and non-IT Department, sponsored applications and hardware that maintains the stability, integrity, and efficient operation of the in-house information systems. Employees monitor, support, and optimize all networked software, application servers, and associated operating systems. They analyze and trouble-shoot operating problems to identify, communicate, and resolve issues and maximize the benefit of the City's IT systems investments.

Distinguishing Features

The Senior Systems Analyst is an advanced, senior-level professional classification. Employees apply an advanced specialized knowledge to analyze facts and solve complex problems. The classification is distinguished from the Senior Network Analyst by the emphasis on maintaining IT and non-IT Department sponsored applications and hardware. The Senior Systems Analyst has primary responsibility for most City systems' architecture and the integrity of hardware devices.

Supervision Received and Exercised

Employees work under the direction of a manager, and receive general instructions regarding the scope and approach to their projects or assignments. The procedures and techniques are left to the discretion of the employee. Employees may exercise lead direction over lower level classifications, may give assistance to peers in the area of their specialty, and may supervise technical staff. When assigned as a project manager, they will give functional supervision to project staff.

Examples of Essential Duties and Responsibilities

The listed examples are illustrative of the classification level and not intended to list all duties typically assigned to this classification. Employees may do all or some of the listed duties, or other related duties.

1. Evaluate the effectiveness, efficiency, compatibility and operations of existing systems. Coordinate and perform in-depth tests, including end-user reviews, for modified and new systems. Work with executive team members, decision makers, and stakeholders to define business requirements and systems goals, or identify and resolve business systems issues. Perform cost-benefit and return on investment analyses for proposed systems to help decide implementation.

- Recommend changes to improve systems and network configurations, and determine hardware or software requirements related to the changes.
2. Plan, design, develop, and deploy new hardware systems and enhancements to existing hardware systems. Develop and implement strategies for improving or further leveraging these systems. Resolve hardware errors, resource problems or security violations. Install and configure system, networking and application software.
 3. Diagnose hardware and software problems and replace defective components; perform data backups and disaster recovery operations. Plan, coordinate, and implement security measures to protect data, software and hardware.
 4. Design and perform server and security audits, system backup procedures, and other recovery processes in accordance with the City's disaster recovery and business continuity strategies. Develop information systems security plans, procedures and standards. Monitor and administer security backups of software and data files. Develop, test and evaluate contingency plans.
 5. Maintain and integrate servers, including database, e-mail, print, backup and storage servers and their associated software into enterprise systems. Analyze system connectivity of servers, shared software, groupware, and other applications. Plan server capacity and budget cost to upgrades for budget planning. Develop and maintain interfaces between various internal and external systems. Apply system upgrades. Collaborate with network staff to ensure smooth and reliable operation of software and systems for fulfilling business objectives and processes.
 6. Create and maintain documentation as it relates to system configuration, mapping, processes, and service records. Monitor and test system performance; prepare and deliver system performance statistics and reports. Research and develop user-training materials about system services and applications.
 7. Conduct research on software and systems products to justify recommendations and to support purchasing efforts. Negotiate contract terms with vendors, outsourcers, and other contractors to secure system-related products and services.
 8. Plan projects and identifies project scope and resources; recommend project budget and spending plan. Identify potential risks and design strategies to mitigate or avoid them. Monitor and track project progress. Recommend changes to project plan in response to unforeseen changes or unexpected results. Manage project resources and budget. Provide technical direction and leadership to less experienced team members.

Minimum Qualifications Upon Entry

Extensive knowledge of:

- Principles of systems planning, security and software management best practices.
- Techniques of UNIX Shell Scripting and SQL programming language
- Characteristics and protocols of Network and server operating systems, including AIX, HP-UX, Linux, MS Windows, and NetWare.

- Standards and protocols of current network hardware, including TCPIP, SAN, Disk Array, and Fiber Switches

General Knowledge of:

- Protocols and characteristics of software typical to the City's IT operation including Internet standards
- Principles and processes for providing customer service including customer needs assessment, meeting quality standards for services and evaluation of customer satisfaction.
- Principles and techniques of project management
- Business and management principles involved in strategic planning, production methods and coordination of people and resources

Skill to:

- Design, develop and implement software and hardware solutions, systems or products
- Identify complex problems and review related information to develop and evaluate options and implement solutions
- Analyze information and evaluate results to choose the best solution and solve problems
- Communicate effectively orally in person and in groups; and write clearly and concise memorandums, reports and other documentation related to the job
- Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems
- Manage projects typical to the job assignment

Ability to:

- Be careful about detail and thorough in completing work tasks
- Develop, design or create new applications, ideas, relationships, systems or products
- Effectively prioritize tasks and plan work
- Explain to people with a non-technical background what the technical information means and how it can be used
- Establish effective working relationships with members inside and outside the organization
- Be pleasant with others on the job and display a good-natured, cooperative attitude
- Accept criticism and deal calmly and effectively in high stress situations

Experience and Education

A typical way to obtain the required knowledge, skills and abilities would be:

A Bachelor's degree in computer science, information science, management information systems, business administration or a related field and five (5) years of experience related to the position; this includes experience with core software applications such as Tivoli Storage Manager; or any combination of experience and training sufficient to support the knowledge, skills and abilities.

Physical and Mental Demands

The listed physical and mental demands are representative of those that must be met by an employee to successfully do the essential functions of this classification. Persons with disabilities may be able to carry out the duties with accommodation. Reasonable accommodation will be evaluated upon request.

The work requires the ability to bend, crawl, climb, and stoop to install, repair and maintain hardware and software. Employees must be able to lift or move personal computers, terminals and peripheral equipment, which weigh up to 50 pounds. Employees must see detail at close range. They will regularly communicate with others to convey or receive information and express ideas; therefore, they must understand the speech of another person, and speak clearly so others can understand. Employees will regularly sit for extended periods. They will use their fingers to make precise coordinated movements when using a computer keyboard or hand and power tools.

Employees apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions. Work requires that employees deal with several abstract and concrete variables and order information into a logical sequence. Employees will occasionally work with emotionally charged individuals and must negotiate agreements between people with varying interests.

Work Environment

Work is regularly performed in an indoor office setting. Work requires providing service at different locations; employees may encounter weather conditions when moving between these locations. The employee may be required to work early and late hours to meet time lines, provide off-hour upgrade and maintenance, and respond to emergency situations.

Senior Systems Analyst, Created _____;