Date Council Approved: March 13, 2007

Date Effective: March 1, 2017

CLASS SPECIFICATION Network Administrator

GENERAL PURPOSE

Under direction, plans, organizes, supervises and participates in the work of professional information technology staff engaged in developing, enhancing, administering and maintaining the City's network infrastructure, network and workstation support services to ensure an efficient, reliable and robust infrastructure for business operations and sharing of information and applications across City departments; consults with managers and staff to determine needs and develop technology solutions and tools; serves as project manager for major installation and/or conversion projects; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Network Administrator plans and supervises the activities of a technology services section of professional and specialized technical staff, serves as technical resource and works with staff to deliver City-wide technology services to meet the needs of City departments for achievement of their business, operational, public service and productivity objectives. The incumbent is responsible for ensuring the effective planning and completion of multiple technology infrastructure projects while ensuring stable, reliable and efficient network, operating system and database performance for internal and external customers. The incumbent is expected to exercise sound independent judgment in managing the delivery of high quality, customer-focused products and services, efficiently and cost-effectively.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.

- 1. Plans, organizes, supervises and evaluates the work of the network services section of the technology services division; with subordinate staff, participates in establishing operational plans and initiatives to meet division goals and objectives; implements division plans, work programs, processes, procedures and policies required to achieve overall division performance results; coordinates and integrates functions and responsibilities to achieve optimal efficiency and effectiveness; participates in developing and monitoring performance against the annual technology budget.
- 2. Plans and evaluates the performance of assigned staff; establishes performance requirements and personal development targets; monitors performance and provides coaching for performance improvement and development; provides or recommends compensation and other rewards to recognize performance; takes disciplinary action, up to and including termination, to address performance deficiencies, subject to management concurrence, in accordance with the City's human resources policies and procedures and labor contract provisions.

- 3. Provides leadership and works with staff to develop and maintain a high performance, customer service-oriented work environment that supports achieving the City's mission, strategic goals and core values.
- 4. Supervises and participates in managing development, infrastructure and/or hardware/software migration projects; serves as project manager for large scale, enterprise-wide server, hardware and operating system installation and conversion projects; reviews and approves project scope of work, detailed project plans, milestones and deadlines; oversees implementation of new operating system upgrades and enhancements; monitors project progress and prepares status reports; reviews and acts on project change requests; approves deliverables; integrates new projects into overall work plans; coordinates, prioritizes and integrates work on multiple projects; manages project completion to ensure accountability for results.
- 5. Develops bid proposals, RFPs and RFIs for professional services, acquisition of technology equipment, hardware, software, materials and supplies and vendor maintenance contracts; establishes evaluation criteria; recommends the selection of vendors; negotiates with vendors; administers contracts and ensures conformance with contract terms and performance requirements; manages and administers the City's network and hardware infrastructure budget.
- 6. Meets with customers to review current and future infrastructure development and enhancement needs and requirements to stay abreast of their business and operating requirements; confers with departments and users regarding the feasibility of alternative approaches to meeting requirements; works with steering and advisory committees and department managers to formulate technology strategies, establish priorities and define applications development and enhancement needs.
- 7. Supervises the technology helpdesk to provide timely resolution of user problems; may take escalated calls and troubleshoot the most complex network problems; coordinates network services activities with other technology sections and departments to optimize performance and use of installed systems in meeting customer needs; provides expert technical information, guidance and support to departments and users as needed.
- 8. Collaborates with other technology services staff to develop and implement technology standards, policies and procedures; manages the development of data standards and administration of enterprise databases.
- 9. Monitors system and network performance and systems to control and support network traffic; identifies utilization and performance issues; forecasts requirements and performs capacity planning studies; oversees maintenance and modification of software to expand capacity and maintain operations to meet department/enterprise requirements; recommends the purchase and upgrade of network and operating system hardware and software.
- 10. Plans, implements and administers network security, including firewalls and intrusion detection and prevention systems; installs security patches; closely monitors firewall and server logs and takes appropriate follow up action; oversees backup operations and ensures backup processes are working properly.
- 11. Maintains a variety of records and documentation, including network schematics, equipment and device inventories; manages maintenance and service contracts.
- 12. Participates in maintaining current, up-to-date disaster recovery plans.

OTHER DUTIES

- 1. Attends a variety of meetings, training sessions, conferences and seminars as required.
- 2. Keeps abreast of advancements and emerging trends in information system and computing technologies and their capabilities.

QUALIFICATIONS

Knowledge of:

- 1. Principles, practices and techniques of information systems management, including applications design, network infrastructure, hardware and software options for business, engineering and operations functions and the cost-benefit of systems alternatives.
- 2. Operating system architecture, characteristics, capabilities, constraints and commands applicable to the City's information systems environment.
- 3. Network architectures and theory and principles of network design and integration, including topologies and protocols.
- 4. Principles, practices and methods of systems/network administration and maintenance, including configuration, performance tuning and diagnostic tools and network management tools and utilities.
- 5. Principles, methods and techniques for installation, configuration and operation of network systems, equipment and devices.
- 6. Methods and techniques for performing connectivity testing and network analysis and troubleshooting, including the uses of diagnostic tools and equipment.
- 7. Internet/intranet technologies and design concepts and techniques, including router and firewall configuration and applicable programming languages.
- 8. Programming theory and programming languages applicable to City platform/network operating systems.
- 9. Database management systems and software, including architectures, diagnostic tools, commands and utilities, applicable to systems administration responsibilities.
- 10. Standard PC software packages, including word processing, spreadsheets and database programs.
- 11. Principles and practices of sound business communication.
- 12. Principles, practices and methods of project management as they apply to information technology projects.
- 13. Principles and practices of effective supervision.
- 14. City human resources policies and procedures and labor contract provisions.

Ability to:

- 1. Plan, organize, integrate and supervise a broad range of network infrastructure, network services, help desk and workstation support and maintenance activities.
- 2. Establish and maintain project and production schedules and balance responsibilities for multiple projects to ensure timely, high-quality results.
- 3. Identify information and technology management issues and opportunities, analyze complex problems and alternatives and develop sound conclusions and recommendations.
- 4. Assess customer needs, set priorities and allocate resources to most effectively meet needs in a timely manner.
- 5. Develop and implement appropriate procedures and controls.
- 6. Develop and maintain effective client relationships with City managers and end users.
- 7. Troubleshoot server hardware and software, network device and/or connectivity problems and make modifications and fixes to resolve problems.
- 8. Understand and apply the analysis of functional requirements to the development of specifications and recommendations for efficient, cost-effective systems and technology solutions.
- 9. Communicate clearly and effectively to diverse audiences of technical and non-technical personnel, both orally and in writing.
- 10. Prepare clear, concise and accurate proposals, contracts, reports, correspondence and other technical written materials.
- 11. Read, interpret, explain and apply technical information on business processes, software and hardware for technical and non-technical users.
- 12. Exercise sound expert independent judgment within general policy guidelines.
- 13. Keep technical skills current to meet continuing work responsibilities.
- 14. Use tact and diplomacy when dealing with sensitive, complex and/or confidential issues and situations.
- 15. Establish and maintain highly effective working relationships with City management, staff and others encountered in the course of work.

Education, Training and Experience:

A bachelor's degree in information systems, information technology or a closely related field. A minimum of six years of progressively responsible experience in the design, development and

administration of systems and network infrastructures in an information systems environment similar in size and complexity to that of the City.

Licenses; Certificates; Special Requirements:

A valid California driver's license and the ability to maintain insurability under the City's vehicle insurance policy.

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this job, the employee is regularly required to sit; talk or hear, both in person and by telephone; use hands to finger, handle and feel computers and standard business equipment; and reach with hands and arms. The employee is frequently required to stand and walk; bend, stoop, kneel and crawl; and lift up to 50 pounds.

Specific vision abilities required by this job include close vision, peripheral vision, depth perception, ability to distinguish basic colors and shades and the ability to adjust focus.

Mental Demands

While performing the duties of this class, the incumbent is regularly required to use written and oral communication skills; read and interpret complex data, information and documents; analyze and solve complex problems; use math/mathematical reasoning; perform highly detailed work under changing, intensive deadlines, on multiple concurrent tasks; work with constant interruptions, and interact with City management, staff and others encountered in the course of work.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee works under typical office conditions, and the noise level is usually quiet. Some assignments involve working near moving mechanical parts where there is risk of electrical shock.