CITY OF KENT
POSITION DESCRIPTION

Position Inventory Number:

Classification Specification: Network Engineer

Salary Range: NR42 - Management Benefit Level C

Position Description: Network Engineer

Incumbent:

Location: Information Technology Department

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GENERAL PURPOSE:

Under the direction of the Technical Services Manager or designee, analyze, design, implement, document, and maintain the City's voice and data Local Area Network (LAN) and Wide Area Network (WAN) Telecommunications architecture, and end user computers; assist users, Information Technology (IT) staff, and City officials in meeting technological needs in the area of network and telecommunication connectivity and performance; coordinate work in conjunction with City departments, officials, IT staff, vendors, and consultants.

Work is characterized by the incumbent's professional expertise in the acquisition, implementation, support, and maintenance of complex network systems, telecommunications, and end user computers. Incumbent is required to maintain up-to-date, detailed knowledge in the analysis, implementation, maintenance and support of Citywide LAN/WAN/telecommunications and end user computing environment. Incumbent will oversee ongoing system performance and security, and will research, recommend, and implement appropriate technologies.

Work is performed under limited supervision. Supervisor sets the overall objectives and resources available. Incumbent and supervisor work together to develop the deadlines, projects, and work to be completed. Incumbent is responsible for the work, plans and carries out the assignment, resolves most conflicts that arise, coordinates work with others, and interprets policies on own initiative in terms of established objectives. Incumbent keeps supervisor informed of progress, potentially controversial matters, or far reaching implications. Work is reviewed in terms of feasibility, compatibility with other work, or effectiveness of results.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Proactively oversee and contribute to daily operations including appropriate documentation of the City's network, telecommunications, and end-user environments to provide a reliable technology environment to the City.

Evaluate current network systems to identify improvements needed, research technology available using current knowledge of industry trends and best practices; analyze solution(s), costs and benefits, including immediate and long range effects, security needs and potential threats; provide recommendations and justification as requested.

Serve as technical lead of network systems and acquisition of servers, infrastructure applications, network management systems, infrastructure management systems and workstation hardware; provide technical advice and support for Citywide personnel.

Review, troubleshoot and resolve highly complex network/technical problems; coordinate solutions through internal resources or through communication with vendor and/or technical support staff; monitor resolutions and timelines and communicate with appropriate personnel.

Work with vendors to design network systems according to specifications to meet the needs of the City.

Develop and document network operational processes.

Implement network designs, upgrades and systems in line with established timelines and guidelines.

Plan, coordinate and manage special projects of limited scope as assigned; develop and maintain project schedules; coordinate schedules with vendors, other divisions in the Information Technology department and other City departments.

Promote cross training and knowledge transfer between Technical Services staff; coordinate and/or provide training to users, IT staff, and other department personnel in the use of computer, network, telecommunication systems and equipment.

Maintain network security consistent with City policy through evaluation and documentation; review and analyze the security procedures and make recommendations for necessary changes.

Provide assistance to the Technical Services Manager; assist with future growth plans; and provide recommendations and justification as requested.

Evaluate and prepare network bid documents in compliance with state and local bidding policies and procedures; assist with preparation of information for Council presentation.

Participate in routine and on-call maintenance for the City's voice and data network.

Attend meetings, seminars and training sessions to maintain current knowledge of technical advances in telecommunications and microcomputers, networks and personal computer applications.

Oversee disposal of equipment no longer used.

Become familiar with, follow, and actively support the vision, missions, values, and behavior statements of the department and the City.

PERIPHERAL DUTIES:

Perform related duties as assigned.

KNOWLEDGE, SKILLS AND ABILITIES:

KNOWLEDGE OF:
- Principles and techniques of analysis, design, and implementation of complex network and communications systems
- Project management techniques
- Microsoft Windows Network systems, Ethernet technologies, Local Area Network (LAN) and Wide Area Network (WAN) systems in a multi-site enterprise setting, voice and data networks, network protocols, implementation and related networking concepts, and technical aspects of networking
- Current literature, trends, developments, best practices and technical aspects in LAN/WAN/Telecommunications
- Quality customer service principles and techniques
- Enterprise e-mail systems oversight including Microsoft Exchange
- Various City standard Operating Systems including Microsoft Windows versions
- Various City standard application software including, but not limited to Microsoft Office Suite and Microsoft Business Applications
- Principles and techniques for managing secure access to City technical environments
- Techniques for deploying computer applications over a network
- Technical documentation planning for new projects and existing procedures
- Capabilities of networks, personal computers and peripheral equipment
- Research and analysis methods and techniques
- Municipal government policies, procedures, structure, applicable local, state, and federal laws, codes, regulations and ordinances

- Principles and practices of governmental budgeting and purchasing procedures and practices
- Record keeping techniques
- Modern office practices, procedures and equipment
- Correct usage of English grammar, spelling, punctuation and vocabulary

SKILLED IN:
- LAN/WAN/Telecommunications analysis, design, and implementation practices and techniques
- Organizing, analyzing and coordinating work flow
- Applying technical aspects of field of specialty in a customer service environment
- Analyzing technical problems and provide effective solutions
- Using interpersonal skills with tact, patience and courtesy
- Effectively communicating complex technical ideas in layperson's terms
- Communicating effectively both orally and in writing
- Planning and organization to meet schedules and timelines
- Documenting network systems design, procedures and applications

ABILITY TO:
- Proactively manage a complex enterprise technology environment including LAN/WAN/Telecomm and end user equipment and software
- Conduct broad technical research, gather and analyze data, recommend and implement solutions related to City technology environment
- Create technical documentation plan for new projects and document existing procedures
- Provide training and leadership to others
- Work flexible work schedules including alternative work schedules; may occasionally be required to work evenings, weekends or holidays in emergency situations; be available for call backs
- Consult and provide technical expertise and assistance to department staff and end users
- Effectively present information and respond to questions from groups of managers, incumbents and users
- Research, establish and advise the City with regard to security standards and procedures
- Understand and evaluate needs of users; evaluate network, telecommunications and personal computer equipment needs and services
- Work effectively on several projects concurrently
- Establish and maintain effective working relationships with co-workers, City staff, officials, vendors and consultants
- Work independently with little supervision; make technically sound decisions
- Work in a team environment to help solve complex problems
- Understand and follow oral and written directions
- Analyze situations accurately and adopt an effective course of action

- Read and interpret documents such as policy manuals, technical computer manuals and procedures, and business periodicals
- Prepare and maintain clear and accurate routine reports, correspondence and procedures
- Respond to common inquiries or complaints from users
- Add, subtract, multiply, divide; compute fractions, ratios, percentages, proportions; draw and interpret graphs and charts; and apply these concepts to practical situations
- Apply common sense understanding to solve practical problems and deal with several variables in standardized situations
- Demonstrate initiative and exemplify the Kent CARES vision, values and behaviors

EDUCATION AND EXPERIENCE REQUIRED:

Education: Bachelors degree in computer engineering, computer science, or a related field; and

Experience: Two (2) years of increasingly responsible experience in network administration, configuration, and end user support.

Or: In place of the above requirements, the incumbent may possess any combination of relevant education and experience which would demonstrate the individual's knowledge, skill and ability to perform the essential duties and responsibilities listed above.

LICENSES AND OTHER REQUIREMENTS:

- Valid Washington State Driver's license, or the ability to obtain within 30 days of employment
- Must be able to successfully pass the City's pre-employment driver's records checks.
- Preferably have one or more of the following or similar certifications: MCSE, CCNA, CISSP, or CCNE

MACHINES, TOOLS AND EQUIPMENT USED:

Typical business office machinery and equipment used include, but are not limited to, personal computer, minicomputers, printers, scanners, telephone, fax and copy machines, cellular phone, pager, calculator, and overhead projector.

Motorized vehicles used include, but are not limited to, a City vehicle to travel to and from user sites.

Standard and specialized hand and power machines, tools and equipment used in computer repairs, network equipment installations and LAN/WAN infrastructures.

PHYSICAL DEMANDS:

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

While performing the duties of this job, the incumbent is regularly required to use arms, hands and fingers to reach handle, feel, or operate objects, materials, tools, equipment or controls. The incumbent is frequently required to sit, stand, walk, hear, and talk normally with or without mechanical assistance. The incumbent is occasionally required to stoop, kneel, crouch, and crawl under desks and panels, and lift up to 25 pounds. Specific vision abilities required by this job include close, distance, color, and peripheral vision; depth perception; and the ability to adjust focus.

WORKING CONDITIONS:

Work is performed in various City departments in a typical office environment, which includes an office, a technical workstation, and a computer room with a controlled environment. Incumbent is required to be on call and available for call backs in the evenings, on weekends and holidays. Incumbent may drive to various user sites by personal or City vehicle. Incumbent may be exposed to users, contractors and vendors/suppliers who may possibly be irate or hostile. The noise level in the work environment is usually moderate to loud.

SIGNATURES:

_____   _____
Incumbent's Signature   Date   Supervisor's Signature   Date

Approval:

_____   _____
Department Director/Designee   Date   Employee Services Director/Designee Date

**Note: This document will be reviewed and updated annually at the time of the Incumbent's performance appraisal; when this position becomes vacant; or, if the duties of this position are changed significantly.

Revised: 07/12/05; 10/31/07