

City of Imperial Beach
POSITION DESCRIPTION

Title: Network Systems Administrator
Department: Administrative Services (Finance)
Division: Information Technology

GENERAL PURPOSE

Under general direction, provides support in the development, installation, implementation, testing, evaluation, and administration of the City's local and wide area networks; installs, configures, tests and supports a variety of network components and devices; performs preventive maintenance on network segments and components; provides liaison and technical assistance to end users; installs and troubleshoots advanced software and hardware configurations; and consults with department representatives to determine hardware/software requirements and develops specifications.

SUPERVISION RECEIVED

Works under the general supervision of the Finance Director.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Performs a variety of duties in the development, installation, implementation, testing, evaluation and administration of local and wide area networks; responds to inquiries and provides technical assistance regarding all aspects of system design, installation and troubleshooting.

Installs and configures network hardware, software and peripheral equipment; troubleshoots, diagnoses, and resolves server and networked devices hardware and software problems.

Installs and maintains network components including routers, switches, bridges, hubs, digital service unit/channel service unit, and other network equipment and software.

Investigates, analyzes and resolves complex network-related problems; resolves compatibility problems across City networks; troubleshoots network failures, router problems and telecommunications problems; recommends and implements changes and improvements.

Participates in the evaluation of network protocols, hardware and software to determine their applicability to City network needs; recommends and implements changes and improvements.

Monitors network security and performance; identifies unauthorized access and potential security risks; participates in projects to enhance network security operations.

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Supports network server, administrative and maintenance operations; performs back-ups; installs and configures software; installs networked equipment including printers.

Provides advanced desktop support to clients; installs and configures hardware and software, operating systems and peripherals; troubleshoots, diagnoses and resolves complex hardware and software problems.

Performs technical writing duties in the development and production of system documentation, instructional and procedural manuals.

Researches and recommends the purchase of computer related equipment and peripherals; orders equipment and software as necessary.

Collaborates with customers to determine the best hardware and software for departmental technology projects.

Performs system-wide or network-wide audits, and generates reports that include system performance, recommended changes, and any other possible data of interest, such as system security.

Assists other departments in designing, and possibly authoring documents/programs; customizes installed software to the specific requirements of a department.

Develops network and system topology maps that assist other staff members in the department or organization to understand the relationships between systems.

Learn the day-to-day operation of all systems.

Coordinates division activities with other divisions and departments and agencies as needed.

Responds to emergencies after regular working hours.

Generates invoices, work requests and associated follow-up actions using the cities data base management system (HTE).

May supervise staff and contract vendors as applicable.

Performs related duties as required.

DESIRED MINIMUM QUALIFICATIONS

Education & Experience

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in computer science, information systems or related field and five years of progressively responsible experience in computer system operation, programming and systems analysis. Years of experience beyond the recommended five years of experience may be substituted on a one for one basis for educational requirements.

CompTIA Certifications or Microsoft Certifications (A+; Network +; Server+; MCSE; MCSA; MCDST) are highly desirable.

KNOWLEDGE OF

Principles and practices of network system design, installation and maintenance.

Principles of hardware and software configuration and installation.

All operating systems/programs that are in use within the entire organization including, but not limited to Windows 2000/2003/XP, Web sense, networked Xerox, HP and Konica Minolta copiers and printers, Norton Antivirus, OWA (Outlook Web Access), Questys, SunGard HTE, and IBM Series 4 computers.

All aspects of configuring and maintaining system security, network security, and site security for information systems.

All available Wide Area Networking technologies currently in use within the organization, including, but not limited to installation and maintenance of routers and bridges, ISDN, T1/FT1 and RAS.

Local Area Networking, including maintenance, installation, and troubleshooting techniques, especially dealing with the TCP/IP protocol and services, and managing a large diversified environment using TCP/IP.

Methods and techniques of troubleshooting hardware and software problems. Cabling protocols, hardware and software.

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Technical specifications, standard performance, and possible configuration options for all common components and peripherals.

Distributed database installation, structuring, maintenance, and troubleshooting.

The Internet, WIFI, HTML, and CGI scripting, maintenance, and troubleshooting.

The national telecommunications infrastructure and ability to work through problems with telecommunications provider to correctly diagnose problems, troubleshoot, and expedite orders, and minimize downtime.

Phone and voicemail system.

Geographical Information System (GIS).

Pertinent Federal, State and local codes, laws and regulations.

ABILITY TO

Evaluate hardware and software requirements.

Implement hardware and software changes and enhancements.

Analyze, troubleshoot and resolve highly technical networking issues.

Install, configure, troubleshoot and/or repair hardware and software problems.

Respond to requests and inquiries from network users and provide assistance as needed.

Be adaptive towards new systems and technology that may be implemented in the organization. Understand the complex relationships between different components in a networked environment. Analyze and define problems and conceptualize feasible solutions, and present all practical solutions in a concise format to non-technical users.

Develop and revise computer programs.

Document and diagram existing code.

Coordinate meetings for product/project demonstrations for users, managers and members of the Information Systems staff.

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Evaluate existing systems and recommend possible enhancements to systems or network components.

Make the necessary changes to any computer component within the organization. Lead and coordinate the activities of a computer user group.

Train other employees on either a one-on-one basis, or in a group.

Coordinate with other staff members to meet deadlines while minimizing downtime. Demonstrate an awareness and appreciation of the cultural diversity of the community. Communicate clearly and concisely, both orally and in writing.

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

TOOLS AND EQUIPMENT

Possession of a valid "C" California driver's license with a satisfactory driving record.

WORK ENVIRONMENT

Environment: Standard office environment. Occasional exposure to temperature swings from indoor to outdoor temperatures; exposure to dust from atmosphere and volumes of paper; infrequent exposure to extreme heat and humidity in unairconditioned facilities; extreme noise working at off-site locations; work schedule is an 80-hour biweekly work period, with unscheduled breaks. Duties may require working varying hours and days. Work is performed in City Hall and at a number of off-site locations. Work characteristics are both formal and informal; both autonomous and team-oriented; having both routine and variable tasks; with variable pace and pressure.

Physical: Primary functions require sufficient physical ability to work in an office setting and operate office equipment. Continuous fine finger dexterity to manipulate small tools and equipment; Frequent walking, standing, sitting, side-to-side turning of neck; firm grasp to lift and move equipment; Occasional bending and stooping, squatting, reaching at and above shoulder height, pushing/pulling, twisting at waist, upward and downward flexion of neck; lifting of objects weighing up to 25 lbs. From below waist to above shoulder level and transporting distances up to one city block; Infrequent kneeling; lifting of objects weighing 50 lbs. from below waist to chest level with or without assistance and transporting distances up to 30 feet.

Vision: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents and to operate equipment.

Hearing: Hear in the normal audio range with or without correction.