CITY OF MILWAUKIE

CLASSIFICATION: NETWORK AND COMPUTER SYSTEMS ADMINISTRATOR

Department: Information Systems Technology (IST)	Grade Number: 65	FLSA: Non-exempt
Location: Public Safety Building	Union: AFSCME	EEO Category: 3 - Technician

DESCRIPTION: The Network and Computer Systems Administrator position is directly responsible for the administration of the City's data, voice and network transportation systems, which encompasses the planning, installation, maintenance and management of systems hardware, software and client/server based applications. This position is also responsible for the administration of organization generated intellectual data, application and database technology infrastructure, infrastructure security and end user technology support. The Network and Computer Systems Administrator is expected to be a leader in the IST department, fostering both the advancement of technology and success of the department's mission. This position works cooperatively with other staff in the department and may assign tasks and activities to other members as part of project implementations or daily end user support. The Network and Computer Systems Administrator reports directly to the IST Director.

DUTIES AND RESPONSIBILITIES: *Tasks listed are intended to be descriptive and not restrictive. An employee in this classification may perform any of the tasks listed; however, these examples do not include all the tasks which an employee may be expected to perform.*

ESSENTIAL DUTIES AND RESPONSIBILITIES:

1. Performs administrative functions for the entire City network and all associated technology hardware systems, applications, databases, and telecommunication hardware, software, and infrastructure; including:

    a. Network Security and Transportation Systems
        1) Manages and maintains all perimeter WAN hardware
        2) Maintains and establishes WAN connectivity with partner agencies and service providers
        3) Monitors and manages remote resource access
        4) Manages and maintains all interior LAN hardware
        5) Maintains LAN connectivity with all city facilities
        6) Maintains a secure computing environment through best practices hardware/software configuration
        7) Monitors LAN and WAN performance to maintain optimal performance
        8) Troubleshoot and repair LAN and WAN hardware and software systems
        9) Specify and deploy new LAN and WAN infrastructure

    b. Server Infrastructure and Supporting Systems
        1) Manage and maintain all physical and virtual server operating systems and services delivered by software infrastructure
        2) Specify and deploy new physical and virtual servers with best practice configurations
        3) Evaluate, deploy and manage cloud service or hosted application systems
        4) Manage and maintain all server hardware and supporting SAN, NAS, and UPS systems
        5) Specify and deploy new server hardware and supporting SAN, NAS, and UPS systems
        6) Troubleshoot and repair all server hardware/software and supporting SAN, NAS & UPS systems
        7) Specify, deploy and maintain organization print services

    c. Communications Infrastructure Internal and External
        1) Manage and maintain fixed and mobile voice communication infrastructure
        2) Manage and maintain paging communication infrastructure
        3) Specify and deploy new fixed and mobile voice communications devices and infrastructure
        4) Manage and maintain electronic messaging (e-mail...etc.) infrastructure
        5) Specify and deploy new electronic messaging (e-mail...etc.) infrastructure

d. Systems Access & Data Management
   1) Manage and maintain network user accounts including application/data access
   2) Manage and maintain network user accounts and application access/publishing through remote access portals
   3) Manage and maintain data backups including disaster recovery and business continuity plans

e. Software Application Infrastructure
   1) Manage, maintain and upgrade all local and network deployed software within vendor recommendations and best practices
   2) Specify and deploy new application packages required for operational excellence

2. Serve as a project manager for assigned technology and non-technology projects including development and maintenance of project plans; schedules; and issues lists; staff and vendor resource coordination, documentation of process and results, and budget management.

3. Maintain technology skill relevance for current market available software and hardware. Develop skills on new and emerging technologies

4. Share in the responsibility of help desk support as needed, and fulfills other duties when assigned.

5. Contribute to the development and implementation of long-term plans, goals and objectives to achieve city technology priorities.

6. Contribute to a positive work environment.

JOB SPECIFICATIONS:
(*Job preparation and prior work experience requirements are minimum standards. Other equivalent combinations of education, training and experience will be considered.*)

1) Job Preparation:
   a) **Education and Experience**:
   Any combination of education and experience that clearly demonstrates the employee's ability to successfully perform the tasks of the position will be considered.

      1) *Education*: Graduate of a four (4) year college with a degree in Information Technology, Business Administration. Microsoft Certified Systems Engineer/Administrator (MCSE/MCSA) and Juniper Network Certified Internet Specialist (JNCIS) or Professional (JNCIP) preferred.

      2) *Experience*: Five (5) years or more and current demonstrable experience on a medium size or larger network of servers, desktop systems, storage, telecommunications, and network devices, systems, and solutions, using current technologies.

   b) **Administrative Level Knowledge**:
   Senior administrative level knowledge of hardware, software, and information technology practices, principals, policies, and techniques used for the delivery, monitoring, licensing and compliance, documentation, tracking, and support of enterprise-wide, workgroup, and desktop systems, applications, solutions, and tools, in the following areas:

   - Server and desktop operating systems (Microsoft operating systems, virtual environments);
   - Network, remote access, and network security systems;
   - Database, Internet, and Email systems (Microsoft SQL and Exchange);
   - Enterprise Application Systems;
   - Office productivity products (Microsoft Office Suite);
   - Telecommunication systems (VoIP);
   - Disaster planning and recovery systems;
   - File and data storage, backup and recovery systems;

- Project planning, Project management, & Vendor management
- Hardware, software, and infrastructure installation, configuration, upgrades, patching, and maintenance (VB, Powershell, WSUS, SCCM).

2) **Cognitive Functions**:
   a. An employee in this position needs to successfully recognize and define technical problems.
   b. Alternative solutions must be considered and short and long term action plans must be developed and sequenced.
   c. Employee must work within guidelines that consist of city codes and regulations, departmental policies and procedures, user system specifications and technical standards and manuals.
   d. Employee has significant latitude to exercise creativity and resourcefulness in order to address new or unique situations.

3) **Communication**:
   Oral and written communication must occur on a regular basis (daily, after hour and weekend, emergency, and more often if needed.) Must be able to communicate complex technical information to subject matter experts and lay persons in a professional and understandable manner. Relationships that must be maintained include direct communication with all City staff, vendors and other computer technology groups. May be required to provide information orally and in writing to members of the City Council and City Management team.

4) **Resource Accountability**:
   Must safeguard and maintain network securities, licenses, and inventories of all City hardware and software and is responsible for ensuring the safeguarding of all computer operating systems. Must exercise cost effective use of city resources. Responsible for making recommendations concerning software and hardware purchases.

5) **Special Requirements**:
   a. Must possess, or be able to obtain by time of hire, a valid Oregon or Washington State Driver's License.
   b. Must be able to pass City's security clearance standards including a review of the driving record.
   c. Must be able to pass a criminal background check for criminal justice information services (CJIS) access.

6) **Supervision**:
   Received: Work is performed (often independently) under the direction of the IST Director who communicates broad policies and assigned activities. Work is reviewed for effectiveness, results obtained, and conformance with identified expectations, and established rules and regulations.

   Exercised: Requires excellent interpersonal communication skills. Must have demonstrable ability to effectively and collaboratively meet the operational needs of the City and the IST Department.

7) **Work Environment:**
   The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

   a. Work is performed mostly in office settings during normal business hours. Occasional travel between City locations is required.
   b. Occasionally required to access awkward or small crawl spaces in order to reach servers, computers, network cabling, etc.
   c. May be required to lift up to 50 pounds.
   d. Occasional evening and weekend work may be required to maintain infrastructure.
   e. Frequent interruptions while working on technical information. Must adapt with minimal or no advance notice to changes in priorities.

8) **Continuous Education and Skill Maintenance**:
An employee in this position is expected to maintain and evolve their technical skills through on the job experience, on the job self-study and through identified guided external training programs and self-guided training programs

The job classification description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

Drafted: 04/22/13
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Revised: