SYSTEM AND NETWORK ADMINISTRATOR

POSITION SUMMARY

The System/Network Administrator plays a crucial role in user account management, provides technical support to end-users, and collaborates with the IT team to design and implement solutions. Key responsibilities include installing and configuring hardware and software, troubleshooting technical issues, and ensuring the optimal performance of our IT infrastructure. Additionally, the position is responsible for monitoring system performance, implementing security measures, and staying abreast of emerging technologies. The role requires a strong problem-solving aptitude, attention to detail, and the ability to work collaboratively in a fast-paced environment. A commitment to maintaining the highest standards of data integrity, confidentiality, and system reliability is essential. Adapting to unique design changes, investigating unforeseen issues, and a commitment to staying informed about emerging developments.

ESSENTIAL DUTIES AND RESPONSIBILITIES

System Administration:

- **User Account Management:**
  - Create new user accounts and ensure proper access levels.
  - Modify existing user accounts as per organizational requirements.
- **SCCM (System Center Configuration Manager) Management:**
  - Utilize SCCM for efficient deployment and management of software and updates.
  - Monitor and troubleshoot SCCM-related issues to ensure smooth operation.
- **User Groups and Policies:**
  - Administer user groups, ensuring users have appropriate access levels.
  - Utilize group policies for security and compliance.
- **Folder Settings and Permissions:**
  - Configure file and folder settings to organize and secure data.
  - Manage permissions to control access and protect sensitive information.
- **System Updates/Patches:**
  - Implement regular system updates and patches to address security vulnerabilities.
  - Schedule updates to minimize disruptions to the operational environment.
- **Vulnerability Management:**
  - Identify and assess vulnerabilities on user systems.
  - Implement strategies to address and mitigate potential security risks.
- **System Performance Monitoring:**
  - Monitor system performance metrics to identify and address bottlenecks.
  - Implement optimizations to ensure the system operates at peak efficiency.

Desktop Administration:

- **Computer Assembly:**
  - Assemble computer systems by integrating hardware components to meet specified configurations and requirements.

  - Ensure proper installation of components such as processors, memory modules, storage devices, and peripherals.
- **Repairs/Replacements:**
  - Diagnose and repair hardware issues in computers and associated peripherals.
  - Facilitate the replacement of faulty components to restore system functionality.
- **Setup/Moves:**
  - Configure and set up new computer systems according to organizational needs and standards.
  - Assist in the relocation of computer equipment during office moves, ensuring minimal disruption to operations.
- **MDT Configuration:**
  - Implement and configure MDTs for efficient use by Public Safety Personnel
  - Streamline and Support users in the field to ensure constant connectivity and reliability of units
- **Software Support:**
  - Provide support for various software applications, including installation, configuration, and troubleshooting.
  - Assist end-users with software-related issues and ensure compatibility with hardware systems.
- **Hardware Support:**
  - Offer technical support for hardware-related concerns, including peripherals and accessories.
  - Collaborate with vendors for warranty support and hardware replacement when necessary.
- **Troubleshooting:**
  - Analyze and resolve technical issues related to both hardware and software components.
  - Utilize systematic troubleshooting methodologies to identify and address problems effectively.
- **Dispatch (24/7/365 Support):**
  - Provide exemplary support for both hardware and software in the 911 Dispatch Center in order to maintain operational status
  - Regularly patch systems in order to ensure security requirements meet/exceed required standards.
  - Work with 3rd Party Vendors to support/maintain a variety of specialized communications equipment located in the Dispatch center
  - Apply systematic troubleshooting methodologies to efficiently identify and resolve problems.

Network Administration:

- **Switching/Routing:**
  - Implement and maintain switching and routing configurations to ensure efficient data traffic within the network.
  - Work with Director to optimize network paths to enhance data transfer speeds and minimize latency.
- **Knowledge of Protocols**:

  - Demonstrate expertise in a variety of networking protocols, such as TCP/IP, UDP, DHCP, and DNS.
  - Stay updated on emerging protocols to adapt to evolving network standards.
- **VLANs (Virtual Local Area Networks):**
  - Utilize VLANs to segment and organize network traffic, improving security and performance.
  - Provide Director with feedback on VLAN strategies to enhance network scalability and flexibility.
- **Port Testing:**
  - Conduct thorough port testing to verify connectivity and troubleshoot network issues.
  - Utilize diagnostic tools to ensure that network ports are functioning optimally.
- **Updates:**
  - Stay vigilant about network device firmware and software updates.
  - Work with Director to ensure updates to networking equipment address vulnerabilities and ensure system stability.
- **System Performance:**
  - Monitor network performance metrics to identify areas for improvement.
  - Work with Director to Optimize network configurations in order to ensure high availability, reliability, and responsiveness.
- **Ransomware Awareness:**
  - Stay informed about the latest ransomware threats and vulnerabilities.
  - Stay educated on best practices and follow IT Team protocols to prevent and respond to potential ransomware attacks.
- **Error Detection:**
  - Employ error detection mechanisms to identify and troubleshoot network issues promptly.
  - Implement logging and monitoring tools to capture and analyze network errors.
- **Path Awareness:**
  - Maintain awareness of network cabling installation paths to ensure minimal interference from electrical sources.
  - Assist in Implementing redundancy and failover mechanisms to ensure continuous connectivity.

Fieldwork:

- **Bucket Truck Work:**
  - Perform elevated work using bucket trucks for tasks such as installing, maintaining, or repairing telecommunication equipment and cameras.
  - Adhere to safety protocols and industry standards while operating bucket trucks at various heights.
- **Cabling:**
  - Layout and Install structured cabling systems to support data, voice, and video communication within buildings or across outdoor spaces.
  - Utilize industry-standard cable types and termination methods for optimal performance and reliability.
- **Design Planning:**

  - Engage with Director in comprehensive design planning for various installations, ensuring efficient use of space, optimal equipment placement, and adherence to project specifications.
  - Collaborate with stakeholders to gather requirements and create detailed designs.
- **Antenna Installation:**
  - Install antennas for various communication purposes, including wireless networking and radio frequency (RF) communications.
  - Ensure proper alignment and configuration of antennas for optimal signal strength and coverage.
- **Camera Installation:**
  - Design and install surveillance camera systems to enhance security in public settings.
  - Configure cameras for optimal coverage, resolution, and integration with monitoring systems.
  - Fundamental comprehension how Network Video Recorders (NVRs) operate
- **Uninterruptible Power Supply(UPS) Maintenance**
  - Install and upkeep UPS hardware for consistent operational status.
  - Routinely monitor battery status to verify system availability and capacity to handle loads during power outages.
  - Replace batteries with quick connectors
  - Properly wire new batteries in either series or parallel configurations
- **Audio/Video Installation:**
  - Plan and install audio systems in city office/conference spaces, considering acoustics, zoning, and user requirements.
  - Optimize audio setups for public announcements, events, and multimedia presentations.
  - Comprehension of audio system design with regards to watts, ohms, and volts.
- **Door Systems Installation:**
  - Install and configure electronic door access control systems for enhanced security.
  - Install/Support badge reader systems for secure access control throughout city facilities
  - Run Network cabling as well as Door Strike Cabling as needed on location.
  - Identify Normally Open vs Normally Closed Lock Circuits, as well as Fail Safe vs Fail Secure lock mechanisms.

Knowledge, Skills, and Abilities:

- Proficient in both current and past Windows Operating Systems, including Windows 10 and newer, as well as Server Operating Systems such as Windows Server 2019 and newer.
- In-depth understanding of network protocols, TCP/IP, DNS, and subnetting
- Familiarity with virtualization technologies (Hyper-V / VMware)
- Understanding of Active Directory and LDAP
- Well-versed in a variety of software packages, including, but not limited to, Microsoft Office Versions 2019 and newer, Adobe Acrobat Pro, Visual Studio, and SQL.

- Capable of understanding and writing scripts/software code in multiple languages, such as VB.Net, C++/C#, Powershell, PHP, and HTML.
- Awareness of Industry best practices in system and network administration
- Skilled in reading, comprehending, and developing new code to integrate with or enhance existing City software.
- Demonstrates expertise in maintaining software modularity in code, recognizing and implementing the associated benefits of this practice.
- Possesses advanced hardware and software troubleshooting and problem-solving skills.
- Well-informed about modern computer software, hardware, and networking equipment.
- Skillful in system and network monitoring tools
- Knowledgeable about VLANs, their operations, and the advantages they offer.
- Proficient in English usage, spelling, vocabulary, grammar, and punctuation.
- Executes work with precision, speed, and the ability to work under general supervision.
- Capable of understanding and following both oral and written instructions.
- Exhibits good judgment, flexibility, creativity, and sensitivity in response to changing situations and needs.
- Establishes, maintains, and fosters positive and harmonious working relationships with individuals encountered during the course of work.
- Excellent interpersonal skills.
- Adaptable and flexible in the face of frequent changes, delays, unexpected events, and a dynamic work environment.
- Ability to prioritize and handle multiple tasks simultaneously
- Adaptability to emerging technologies and industry trends
- Ability to work independently and as part of a team
- Strong analytical skills for system and network performance tuning
- Skilled Communicator with a focus on Collaborating with leaders throughout the city to drive departmental growth and efficiency through the utilization of technology.
- Excellent Self-Awareness as errors in judgment have the potential to notably impact the operations of one or more lines of business or operations.
- Ability to Handle sensitive and/or complex information as permitted by the supervisor.

QUALIFICATIONS

Education and Experience:

- Bachelor Degree in Computer Science or related field.
- Three to five years of experience in Information Technology
- Or the equivalent combination of education and experience sufficient to successfully perform the essential duties of the job.

Special Requirements (position requirements at entry):

- Valid Driver's License

WORKING CONDITIONS

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- Positions in this class typically require: climbing, balancing, stooping, kneeling, crouching, reaching, fingering, talking, hearing, seeing and repetitive motions.
- Incumbents may be subjected to electrical currents, fumes, odors, dusts, gases and extreme temperatures and travel.
- Working conditions involve some exposure to moderate risk of accident and require following basic safety precautions. Physical demands include moderate physical activity that includes prolonged standing and/or walking, handling moderate weight objects and/or using or carrying equipment. Exerting up to 75 pounds of force occasionally, and/or up to 40 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects.
- Work requires routine in-town travel.

Classification: Grade 17 (G-17)
FLSA: Exempt
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Updated: 03/11/22 by HR Nameniuk, IT Director Meyer; Commission approved reclassify from Advanced Computer Technician, non-exempt, Grade 15 with the 2025 budget, updates by IT Director Meyer and HR Director Nameniuk 10/25/2024, reviewed by Attorney Mackenzie Hertz for FLSA Exemption. Classification updated by HR Torgerson to align with the new pay scale, effective June 23, 2025.