SENIOR NETWORK ADMINISTRATOR

SUMMARY/PURPOSE
To ensure the stability of voice, data, video, and wireless network services. This involves planning, designing, and developing local area networks (LANs) and wide area networks (WANs) across the organization, participating with the installation, monitoring, maintenance, support, and optimization of all network hardware, software, and communication links, analyzing and resolving network hardware and software problems in a timely and accurate fashion, and providing end user training as required. This classification also participates in the planning and implementation of policies and procedures to ensure system provisioning and maintenance that is consistent with the City's goals, industry best practices, and regulatory requirements.

DISTINGUISHING FEATURES OF THE CLASS
Employees at a Senior Network Administrator level are distinguished from the Network Administrator by the level of responsibility assumed and the complexity of duties assigned. Positions at this level exercise more independent discretion and judgment in matters related to work.

ESSENTIAL DUTIES AND RESPONSIBILITIES (other duties may be assigned)

1.   Perform network design, assist in developing long-term strategies and planning for meeting future computing needs.
2.   Create and maintain documentation as it relates to network configuration, network mapping, processes, and service records.
3.   Aid in the development, implementation and maintenance of policies, procedures, and associated training plans for network administration and usage.
4.   Participate in business continuity and disaster recovery plans, maintain current knowledge of plan executables, and respond to crises in accordance with the plans.
5.   Coordinate and conduct network project meetings and objectives.
6.   Develop and test disaster recovery procedures to protect against catastrophic circumstances or other hardware failures in all network components.
7.   Design and deploy LANs, WANs, and wireless networks, including firewalls, routers, switches, wireless access points, UPSs, and other network hardware.
8.   Conduct research on network products, services, protocols, and standards to remain abreast of developments in the networking industry, evaluate and recommend products/services for purchase.
9.   Interact and negotiate with vendors, outsourcers, and contractors to secure network products and services.
10.   Configure networks to ensure their smooth and reliable operation for fulfilling business objectives and processes.
11.   Monitor and analyze network performance and troubleshoot problem areas as needed and develop strategies for improving or further leveraging the network performance.
12.   Evaluate documented resolutions and analyze trends for ways to prevent future problems and alert management to emerging trends in incidents.
13.   Ensure network connectivity of all servers, workstations, telephony equipment, IP faxing devices, and other network appliances.
14.   Manage all network hardware and equipment, including routers, switches, wireless controllers, firewalls, and UPSs.
15.   Recommend, schedule, and perform network improvements, upgrades, and repairs.
16.   Provide network asset management, including maintenance of network component inventory and related documentation and technical specifications information.
17.   Monitor and test network performance and provide network performance statistics and reports.
18.   Participate in managing all network security solutions.
19.   Perform network security audits.

20. Assist users with questions and/or problems regarding available network resources.
21. Maintain up-to-date knowledge of the latest technology.
22. Act as a team lead in the training and mentorship of Network Administrators as well as be an escalation point for advanced or difficult network solutions.

JOB REQUIREMENTS
To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
   A. Graduation from an accredited technical school or college/university with a degree in the field of computer science, management information systems or related discipline and three years of progressively responsible, verifiable experience in technology system support, including at least two years of full-time experience in network design, implementation, and maintenance; or
   B. Five years of full-time, verifiable experience in network design, implementation, and maintenance; or
   C. A combination of verifiable education and experience equaling five years which demonstrates possession of the knowledge, skills, and abilities listed below.

2. Knowledge Requirements
   A. Extensive hands-on technical knowledge of network systems, protocols, and standards such as TCP/IP, EIGRP, 802.11x, SIP, H.323, etc.
   B. Strong knowledge of network management and analysis tools, preferably in SolarWinds.
   C. Extensive hardware, software, and network connection troubleshooting experience.
   D. Working technical knowledge of current network hardware, preferably with CISCO.
   E. Extensive knowledge of firewalls, intrusion detection systems, and other network security measures, preferably with CISCO and Palo Alto.
   F. Proven experience with network capacity planning, network security principles, and general network management best practices.
   G. Excellent knowledge of IP telephony systems, preferably with CISCO Call Manager, Unity, and UCCX.
   H. Competence with testing tools and procedures for voice and data circuits.
   I. Knowledge of applicable data privacy practices laws and PCI compliancy requirements.
   J. Good understanding of the organization's goals and objectives.

3. Skill Requirements
   A. Skill at installing/configuring firewalls, switches, routers, bridges, and other networking infrastructure.
   B. Skill at working in a multi-site switched and routed environment.
   C. Skill with LAN, WAN, WLAN, and WWAN design and implementation.
   D. Skill with network capacity planning, network security principles, and general network management best practices.
   E. Highly self-motivated and directed.
   F. Keen attention to detail.
   G. Skill at leading in a team-oriented, collaborative environment.

4. Ability Requirements
   A. Ability to conduct research into networking issues and products as required.
   B. Ability to communicate both orally and in written form.
   C. Ability to analyze and problem-solve.
   D. Ability to effectively prioritize and execute tasks in a high-pressure environment.
   E. Ability to present ideas in business-friendly and user-friendly language.

F. Ability to provide excellent customer service.
G. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
H. Ability to effectively communicate on a one-to-one basis and with groups to obtain or provide information related to user needs.
I. Ability to be self-motivated and a strong team leader while prioritizing and executing tasks in a high-pressure environment.

5. Physical Ability Requirements
A. Ability to be available for standby and/or callback.
B. Ability to sit for extended periods of time.
C. Ability to gather, analyze, and organize information.
D. Ability to read, analyze and interpret technical diagrams and written procedures.
E. Ability to coordinate multiple tasks efficiently.
F. Ability to occasionally stoop, crouch, recline, climb ladders, and reach above shoulder height when installing equipment and inspecting cables in floors and ceilings.
G. Ability to lift and transport moderately heavy objects weighing up to 50 pounds.
H. Dexterity of hands and fingers to operate a computer keyboard, mouse, power tools, and to handle other computer components.
I. Ability to attend work on a regular basis.
J. Ability to transport oneself to and from City of Duluth facilities.

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WC: 8810	Pay: 140	EEOF: Admin/Finance	CC:	Resolution: