



Title: Senior Network Operations Engineer

FLSA Status: Exempt

BRIEF DESCRIPTION:

The purpose of this position is to plan, install, perform system administration and advanced configuration, manage and oversee cyber security, application servers, network storage systems, switches, routers, firewalls and other network communications systems and assets. This is accomplished by working with other departments and management staff by assessing needs, requirements and available resources, managing installation and configuration projects, assessing effectiveness of current resources, managing physical and virtual network servers and storage environments, developing, configuring and overseeing cyber security protocols and systems, and supervising lower level staff and contractors. Working with software vendors and manufacturers for problem identification and resolution, creating complex reports, training other technical staff, developing and maintaining technical documentation, managing or leading technology projects and supervising lower level staff and contractors.

ESSENTIAL FUNCTIONS:

Note: This information is intended to be descriptive of the key responsibilities of the position. The list of essential functions below does not identify all duties performed by any single incumbent in this position. Additionally, please be aware of the legend below when referring to the physical demands of each essential function.

| (S) Sedentary | (L) Light | (M) Medium | (H) Heavy | (V) Very Heavy |
|---|---|---|---|--|
| Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time. | Exerting up to 20 lbs. occasionally; 10 lbs. frequently; or negligible amounts constantly; OR requires walking or standing to a significant degree. | Exerting 20-50 lbs. occasionally; 10-25 lbs. frequently; or up to 10 lbs. constantly. | Exerting 50-100 lbs. occasionally; 10-25 lbs. frequently; or up to 10-20 lbs. constantly. | Exerting over 100 lbs. occasionally; 50-100 lbs. frequently; or up to 20-50 lbs. constantly. |

| # | Code | Essential Functions | % of Time |
|---|------|---|-----------|
| 1 | M | Performs advanced level technology analysis, configuration and systems management relating to server and storage systems, cyber security, routers switches, firewall and other network devices. Operates, repairs and upgrades systems, administers network security and monitoring systems, virtual and physical servers, configuration and monitoring of cyber security and monitoring systems for intrusion prevention, detection and mitigation. Analyzes, troubleshoots and resolves problems with assigned systems, and provides analytical and technical support in the design, construction, installation, operation, maintenance, and repair of large, complex, and geographically diverse computing, network and cyber security equipment and software. | 45% |
| 2 | S | Serves as a project lead and technical expert on various network, security and communication related procurements, installation, and construction projects, preparing proposal and bid documents for purchase of communications and security related equipment or services, coordinating and supervising the work of contracted employees and project staff, and maintaining effective liaison with | 35% |



| | | | |
|---|---|--|-----|
| | | suppliers, contractors and departments. | |
| 3 | S | Manages information and administrative tasks by serving as a liaison to internal and external requests for information, preparing and presenting progress and status reports, and maintaining knowledge currency with industry technology advancements and supervises lower level staff, consultants, temporary employees and contractors. | 20% |



JOB REQUIREMENTS:

| -Description of Minimum Job Requirements- | |
|---|--|
| Formal Education | <p>Work requires broad knowledge in a general professional or technical field. Knowledge is normally acquired through four (4) years of an accredited college or university resulting in a Bachelor's degree or equivalent in Computer Science, Computer Engineering, Management Information Systems or a related field.</p> <p>Additional directly related experience beyond the minimum requirement may substitute for the required education based on the ratio of one and a half (1.5) years of experience for each (1) year of education.</p> |
| Experience | A minimum of four (4) years of experience in network, server, and/or data center operations. |
| Supervision | Work requires essentially functioning as lead worker performing the same work as those directed, and includes overseeing work quality, training, instructing, and scheduling work. |
| Human Collaboration Skills | Decisions regarding implementation of policies may be made. Contact may involve support of controversial positions or the negotiation of sensitive issues or important presentations. Contacts may involve stressful, negative interactions with the public requiring high levels of tact and the ability to respond to aggressive interpersonal interactions. |
| Freedom to Act | The employee normally performs the job by following established standard operating procedures and/or policies. There is a choice of the appropriate procedure or policy to apply to duties. Performance reviewed periodically. |
| Technical Skills | Advanced: Work requires advanced skills and knowledge in approaches and systems, which affect the design and implementation of major programs and/or processes organization-wide. Independent judgment and decision-making abilities are necessary to apply technical skills effectively. |
| Budget Responsibility | Position has limited fiscal responsibility. May assist in the collection of data in support of recommendations for departmental budget allocations. May have program/project level budget and expenditure authority on a project by project basis. |
| Reading | Advanced - Ability to read literature, books, reviews, scientific or technical journals, abstracts, financial reports, and/or legal documents. Ordinarily, such education is obtained in at the college level or above. However, it may be obtained from experience and self-study. |
| Math | Advanced - Ability to apply fundamental concepts of theories, work with advanced mathematical operations methods, and functions of real and complex variables. Ordinarily, such education is obtained in at the college level or above. However, it may be obtained from experience and self-study. |
| Writing | Advanced - Ability to write editorials, journals, speeches, manuals, or |



| |
|---|
| critiques. Ordinarily, such education is obtained in at the college level or above. However, it may be obtained from experience and self-study. |
| Certification & Other Requirements |

| KNOWLEDGE |
|---|
| <ul style="list-style-type: none"> • Principles practices and techniques of customer service. • Systematic approach to problem solving. • Time management and organizational skills. • Advanced computer hardware/software installation, configuration, and troubleshooting processes. • Research methodology and data analysis techniques. • Computer software methodology and data analysis. • Techniques and procedures of software and network support for multiple users. • Installation, configuration, and troubleshooting processes for operating systems and networks. • Networking and accessory equipment support for multiple users. • Advanced understanding of TCP/IP network protocols, routing methodologies, OSI communications model, and VLAN/QOS provisioning methodologies. • Advanced Active Directory • Advanced virtualization hypervisors (VM Ware) • Advanced server hardware such as disk storage subsystems, UPSs, and power management systems. • Advanced scripting languages such as Powershell, Python, PHP, etc. • Advanced network operating system (i.e. Windows Server 20xx, Linux, OES) • Advanced wireless communications protocols such as IEEE 802.11 |

| SKILLS |
|---|
| <ul style="list-style-type: none"> • Advanced word processing, spreadsheet, presentation and database software. • Specialized software related to functional area. • Advanced business, systems and data analysis. • Advanced network analysis and troubleshooting. • Project management and implementation. • Advanced systems administration. |



ABILITIES

- Analyze and understand business, technology, hardware and software needs.
- Understand, and effectively describe and document, business and technical processes.
- Lead or manage business analysis, systems development and integration projects.
- Perform and/or supervise configuration of enterprise surveillance, security and communications systems used by the District.
- Negotiate and influence effectively.
- Recognize problems, develop recommendations and solutions, and oversee corrections.
- Manage time effectively and maintain project schedules.
- Supervise lower level staff, contractors and others effectively.
- Communicate clearly and effectively, both orally and in writing, with internal and external contacts.
- Interact professionally with District employees and outside agency representatives.
- Read, analyze, and interpret general business publications and professional journals, technical publications, and government regulations.
- Write reports, business correspondence, and procedure manuals.
- Present information and respond to questions from groups of managers, customers, and the general public.
- Interpret technical documents, blueprints, schematic drawings, operations and maintenance manuals and procedures.
- Assess, troubleshoot, install and repair computer, communications and network equipment and systems.
- Prepare, evaluate and manage complex, technical bid and proposal documents for communication related goods or services.
- Solve complex software and hardware technical problems in a logical manner
- Work independently.
- Conduct research to obtain undocumented solutions(s) for difficult hardware/software problems.



OVERALL PHYSICAL STRENGTH DEMANDS:

-Physical strength for this position is indicated below with "X"-

| Sedentary | Light | Medium X | Heavy | Very Heavy |
|---|--|---|---|--|
| Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time. | Exerting up to 20 lbs. occasionally, 10 lbs. frequently, or negligible amounts constantly OR requires walking or standing to a significant degree. | Exerting 20-50 lbs. occasionally, 10-25 lbs. frequently, or up to 10 lbs. constantly. | Exerting 50-100 lbs. occasionally, 10-25 lbs. frequently, or up to 10-20 lbs. constantly. | Exerting over 100 lbs. occasionally, 50-100 lbs. frequently, or up to 20-50 lbs. constantly. |

PHYSICAL DEMANDS:

| C Continuously 2/3 or more of the time. | F Frequently From 1/3 to 2/3 of the time. | O Occasionally Up to 1/3 of the time. | R Rarely Less than 1 hour per week. | N Never Never occurs. |
|---|---|---|---|-----------------------------|
|---|---|---|---|-----------------------------|

Note: This is intended as a description of the way the job is currently performed. It does not address the potential for accommodation.

| -Physical Demand- | -Frequency- | -Brief Description- |
|------------------------------------|-------------|--|
| Standing | F | Observing worksite; observing work duties; communicating with co-workers |
| Sitting | F | Desk work; meetings; driving |
| Walking | F | To other departments/offices; around work site |
| Lifting | F | Supplies; equipment; files |
| Carrying | F | Supplies; equipment; files |
| Pushing/Pulling | O | Equipment |
| Reaching | O | For supplies |
| Handling | O | Paperwork |
| Fine Dexterity | C | Computer keyboard; telephone keypad; calculator |
| Kneeling | O | Retrieving items from lower shelves/ground |
| Crouching | O | Retrieving items from lower shelves/ground |
| Crawling | R | Under equipment |
| Bending | O | Retrieving items from lower shelves/ground; making repairs |
| Twisting | F | From computer to telephone; getting inside vehicle |
| Climbing | F | Stairs; ladders; step stools; onto equipment |
| Balancing | F | On ladders; on equipment; on step stools |
| Vision | C | Reading; computer screen; driving; observing work site |
| Hearing | C | Communicating via telephone/radio; to coworkers/public |
| Talking | C | Communicating via telephone/radio; to co-workers/public |
| Foot Controls | F | Driving |
| Other (specified if applicable) | | |

MACHINES, TOOLS, EQUIPMENT, SOFTWARE, AND HARDWARE:

Computer repair tools, canned air, vacuums, liquid cleaners/solvents, car, truck, cell phone, pager, telephone, copier, computer and associated hardware and software.



ENVIRONMENTAL FACTORS:

| | | | | |
|--------------------------|------------------------|--------------------------|--------------------|-------------------|
| C Continuously | F Frequently | O Occasionally | R Rarely | N Never |
|--------------------------|------------------------|--------------------------|--------------------|-------------------|

| | | | | |
|-------------------|------------------------------------|-------------------------------------|------------------------|-------------------|
| D Daily | W Several Times Per Week | M Several Times Per Month | S Seasonally | N Never |
|-------------------|------------------------------------|-------------------------------------|------------------------|-------------------|

| -Health and Safety Factors- | |
|-----------------------------|---|
| Mechanical Hazards | O |
| Chemical Hazards | N |
| Electrical Hazards | O |
| Fire Hazards | N |
| Explosives | N |
| Communicable Diseases | N |
| Physical Danger or Abuse | N |
| Other (see 1 below) | N |

| -Environmental Factors- | |
|-------------------------|---|
| Respiratory Hazards | N |
| Extreme Temperatures | S |
| Noise and Vibration | O |
| Wetness/Humidity | S |
| Physical Hazards | O |

(1) N/A

PROTECTIVE EQUIPMENT REQUIRED:

Hard Hat

NON-PHYSICAL DEMANDS:

| | | | |
|---|---|---|-----------------------------------|
| F Frequently From 1/3 to 2/3 of the time | O Occasionally Up to 1/3 of the time | R Rarely Less than 1 hour per week | N Never Never occurs |
|---|---|---|-----------------------------------|

| -Description of Non-Physical Demands- | -Frequency- |
|---|-------------|
| Time Pressure | F |
| Emergency Situation | O |
| Frequent Change of Tasks | F |
| Irregular Work Schedule/Overtime | O |
| Performing Multiple Tasks Simultaneously | F |
| Working Closely with Others as Part of a Team | F |
| Tedious or Exacting Work | O |
| Noisy/Distracting Environment | F |
| Other (see 2 below) | N |

(2) N/A

PRIMARY WORK LOCATION:

| | | | |
|--------------------------------|---|---------------------|---|
| Office Environment | X | Vehicle | |
| Warehouse | | Outdoors | X |
| Shop | | Other (see 3 below) | |
| Recreation/Neighborhood Center | | | |

(3)N/A

The above statements are intended to describe the general nature and level of work being performed by individuals assigned to this position. They are not intended to be an exhaustive list of all responsibilities, duties, and skills required. This description is subject to modification as the needs and requirements of the position change.



The above statements are intended to describe the general nature and level of work being performed by individuals assigned to this position. They are not intended to be an exhaustive list of all responsibilities, duties, and skills required. This description is subject to modification as the needs and requirements of the position change.

CLASS HISTORY

Adopted: 12/2018
Revised:
Title Change:
Maintenance
Update:
Abolished:
Job Key: TBD