

Title: Network Operations Engineer

FLSA Status: Non-Exempt

#### **BRIEF DESCRIPTION:**

The purpose of this position is to oversee the District's network infrastructure, including configuration, installation, maintenance, and operation of all network equipment, fiber optic and copper cable plants and the data center. This is accomplished by performing network security and intrusion prevention/detection services, backing up the network and business continuity systems, implementing technology improvements, methods, and practices to enhance network systems response times, reliability, and scalability, installing, documenting and implementing new equipment and methods, and troubleshooting, diagnosing, and resolving network and server related problems. Other duties include serving as the on call representative for after hours and weekend support.

#### **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.	Exerting up to 20 lbs.	Exerting 20-50 lbs.	Exerting 50-100 lbs.	Exerting over 100 lbs.
occasionally or negligible	occasionally; 10 lbs.	occasionally; 10-25 lbs.	occasionally; 10-25 lbs.	occasionally; 50-100 lbs.
weights frequently; sitting	frequently; or negligible	frequently; or up to 10 lbs.	frequently; or up to 10-20	frequently; or up to 20-50
most of the time.	amounts constantly; OR	constantly.	lbs. constantly.	lbs. constantly.
	requires walking or standing		-	
	to a significant degree.			

#	Code	<b>Essential Functions</b>	% of Time
1	M	Manages network and server operations by administering network, data communications, video surveillance systems, and server operations, monitoring the system status, diagnosing and resolving technically challenging and difficult problems in the network operations unit, provisioning new switches, servers, and routers, and implementing, troubleshooting, upgrading, documenting and maintaining District applications.	80%
2	L	Assumes administrative tasks by managing projects, writing performance and failure reports, developing and documenting district procedures, researching new technologies and maintaining knowledge currency with industry technology advancements.	20%

#### **JOB REQUIREMENTS:**

-Description of Minimum Job Requirements-				
Formal Education	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			

Date Established: 03/2009
Date Revised: N/A



	Information Systems or a related field.
Experience	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.  A minimum of three (3) years of experience in network, server, and/or data center operations.
Supervision	Work requires functioning as a lead worker performing essentially the same work as those directed, and includes overseeing work quality, training, instructing, and scheduling work.
Human Collaboration Skills	Work may require providing advice to others outside direct reporting relationships on specific problems or general policies. Contacts may require the consideration of different points of view to reach agreement. Elements of persuasion may be necessary to gain cooperation and acceptance of ideas.
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 no fiscal responsibility.
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	Intermediate - Ability to write reports, prepare business letters, expositions, and summaries with proper format, punctuation, spelling, and grammar, using all parts of speech. Ordinarily, such education is obtained in high school up to college. However, it may be obtained from experience and self-study.
Certification & Other Requirements	•

Date Established: 03/2009 Date Revised: N/A



#### **KNOWLEDGE**

- 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 network directory services (i.e. Active Directory, eDirectory.
- Advanced server hardware such as tape and disk storage subsystems, UPSs, and power management systems.
- Advanced network operating system (i.e. Windows Server 200X, Linux, OES)
- Advanced wireless communications protocols such as IEEE 802.11

#### **SKILLS**

- Advanced word processing, spreadsheet, presentation and database software.
- Specialized software related to functional area.

#### **ABILITIES**

- Solve complex software and technical problems in a logical manner.
- Communicate effectively with District personnel and the public, including vendors.
- Follow Help Desk procedures.
- Maintain working knowledge of a wide variety of commonly used hardware.
- Provide instruction on hardware and communicate technical information to users.
- Install, configure, troubleshoot, and maintain all network related applications and hardware.
- Utilize time management skills and multi-tasking capabilities.
- Work independently within established guidelines.
- Conduct research (via phone or internet) to obtain undocumented solution(s) for difficult hardware/software problems.
- Learn network analyzers
- Learn Intermediate Structured Query Language (SQL)



### **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	F	0	R	N
Continuously	Frequently	Occasionally	Rarely	Never
2/3 or more of the time.	From $1/3$ to $2/3$ of the time.	Up to 1/3 of the time.	Less than 1 hour per week.	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 work site; observing work duties; communicating	
		with co-workers	
Sitting	F	Desk work; meetings; driving	
Walking	О	To other departments/offices; around work site	
Lifting	О	Supplies; equipment	
Carrying	О	Supplies; equipment	
Pushing/Pulling	О	File drawers; equipment; tables and chairs	
Reaching	F	For supplies; for files	
Handling	F	Paperwork	
Fine Dexterity	C	Computer keyboard; telephone keypad; calculator	
Kneeling	О	Retrieving items from lower shelves/ground	
Crouching	R	Filing in lower drawers; retrieving items from lower	
		shelves/ground;	
Crawling	R	Under equipment	
Bending	О	Filing in lower drawers; retrieving items from lower	
		shelves/ground;	
Twisting	F	From computer to telephone; getting inside vehicle	
Climbing	R	Stairs; step stools	
Balancing	R	On step stools	
Vision	C	Reading; computer screen; driving; observing work site	
Hearing	C	Communicating via telephone/radio; to co-workers/public	
Talking	С	Communicating via telephone/radio; to co-workers/public	
Foot Controls	0	Driving	
Other	N		
(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.

4

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### **ENVIRONMENTAL FACTORS:**

С	F	О	R	N
Continuously	Frequently	Occasionally	Rarely	Never

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

D	W	M	S	N
Daily	Several Times Per Week	Several Times Per Month	Seasonally	Never
	WCCK	Wolldi		

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

### PROTECTIVE EQUIPMENT REQUIRED:

### **NON-PHYSICAL DEMANDS:**

F	0	R	N
Frequently	Occasionally	Rarely	Never
From 1/3 to 2/3 of the time	Up to 1/3 of the time	Less than 1 hour per week	Never occurs

-Description of Non-Physical Demands-	-Frequency-
Time Pressure	О
Emergency Situation	R
Frequent Change of Tasks	0
Irregular Work Schedule/Overtime	О
Performing Multiple Tasks Simultaneously	F
Working Closely with Others as Part of a Team	F
Tedious or Exacting Work	F
Noisy/Distracting Environment	R
Other (see 2 below)	N

<sup>(2)</sup> N/A

### **PRIMARY WORK LOCATION:**

Office Environment	X	Vehicle	
Warehouse		Outdoors	
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.

**Network Operations Engineer** 

<sup>(1)</sup> N/A