



Job Description
Prepared/Revised: November 2022

Job Title: Network & Infrastructure Engineer
Job Family: Non-Certified
Pay Program: Administrative
Typical Work Year: 12 months

Job Code: 090539
FLSA Status: Exempt - C
Pay Range: L05

SUMMARY: Engineers, maintains, and monitors, the operation of the organization’s Local Area, Wide Area and Wireless networks (LAN/WAN/WLAN). Provides technical support related to the communications infrastructure, including monitoring, installing, configuring, maintaining, and repairing network systems and components consistent with the organization’s short- and long-term objectives. Implements network policies and procedures and ensures adherence to District network availability and security standards.

ESSENTIAL DUTIES AND RESPONSIBILITIES: *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, skill and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Job Tasks Descriptions	Frequency	% of Time
1. Troubleshoot, analyze, and maintain District LAN, WAN and WLAN connectivity, supporting networking to District mission critical systems that communicate through the network infrastructure. Engineer and maintain datacenter network infrastructure sufficient to support the District’s virtual and physical systems.	D	30%
2. Communicate network and performance issues to the Network and Infrastructure Teams, and hardware/software vendors as required. Monitor, troubleshoot, and resolve complex network and communications technical issues to improve network performance for all District systems and sites.	D	20%
3. Troubleshoot, implement, upgrade and maintain networking for District remote sites. This includes the programming of complex LAN/WAN/WLAN routers, switches, controllers and appliances.	W	10%
4. Communicate and coordinate with other District IT teams and other District Departments as required. Provide timely communications of service risks, interruptions, and infrastructure changes. Elevate higher level issues requiring additional support to Network and Infrastructure Teams as needed for resolution.	D	10%
5. Provide support for enterprise systems projects including District technical specifications, service level agreements / policies, systems moves and changes, including bandwidth upgrades, switch/router upgrades, and network improvements.	W	10%
6. Provide support to implement, troubleshoot, and maintain district fiber network and Internet connections, including setting up backup network connections and redundant network links to prepare for ISP, weather and other network outages.	W	5%
7. Develop, test, implement and train on District network standards. Responsible for maintenance of network design and configuration documentation for all network hardware and software.	W	10%
8. Perform other duties as assigned.	Ongoing	5%
TOTAL		100%

EDUCATION AND RELATED WORK EXPERIENCE:

- Associate’s degree in computer science or equivalent major. Two (2) years of similar and relevant network experience may be substituted for this requirement.
- Minimum of two (2) years’ experience in the installation and maintenance of enterprise LAN/WAN/WLAN network systems.

LICENSES, REGISTRATIONS or CERTIFICATIONS:

- Criminal background check required for hire.

TECHNICAL SKILLS, KNOWLEDGE & ABILITIES:

- Knowledge of LAN, WAN, and WLAN network design, installation, and maintenance.
- Knowledge of Ethernet Infrastructures.
- Familiarity with fiber Infrastructure.
- Familiarity with enterprise network management and troubleshooting.
- Knowledge of network hardware and software applications.
- Ability to work with multiple operating systems and protocols.
- Ability to analyze and resolve network issues.
- Strong organizational skills and ability to multi-task with minimal supervision.
- Ability to function in a team-based environment with the ability to share knowledge and a willingness to learn from the other team members.
- Strong commitment to customer service.
- Strong oral and written communication skills, including the ability to communicate effectively with staff with various levels of technical ability.
- Strong critical thinking and problem-solving skills.
- Ability to accept shifts of on call assignment that rotates among team members, responding to urgent calls on a 24/7 basis.
- Ability to promote and follow Board of Education policies, District policies, building and department procedures.
- Ability to stay current with district policy, standards and training in the areas of data quality, data privacy, and cyber-security with respect to student and staff data, and related information systems. Ability to communicate, interact and work effectively and cooperatively with all people, including those from diverse ethnic and educational backgrounds.
- Ability to recognize the importance of safety in the workplace, follow safety rules, practice safe work habits, utilize appropriate safety equipment and report unsafe conditions to the appropriate administrator.

MATERIALS AND EQUIPMENT OPERATING KNOWLEDGE:

- Knowledge of Routing Architecture and general Network design, Spanning Tree, ARP, Cisco IOS, IP Subnetting, TCP/IP, routing protocols, DNS, DHCP, and SNMP. Familiarity with EIGRP, IPS/IDS, QoS, Firewalls, and Data/Telecom Integration.
- Knowledge of Networking Hardware, Layer2/3 switches, routers, virtual switch infrastructure, copper and fiber network connectivity, network analyzers and packet capture.
- Familiarity with Syslog Server, SIEMs, firewalls, wireless systems.
- Familiarity with enterprise network and communications infrastructure.
- Knowledge of and experience with Google and Microsoft Office, including knowledge and experience with Microsoft Visio.
- Advanced operating knowledge of and experience with personal computers and peripherals.

REPORTING RELATIONSHIPS & DIRECTION/GUIDANCE:

	POSITION TITLE	JOB CODE
Reports to:	Infrastructure Engineering Manager	130901

	POSITION TITLE	# of EMPLOYEES	JOB CODE
Direct reports:	This job has no direct supervisory responsibilities.		

BUDGET AND/OR RESOURCE RESPONSIBILITY:

- None

PHYSICAL REQUIREMENTS & WORKING CONDITIONS: *The physical demands, work environment factors and mental functions described below are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

PHYSICAL ACTIVITIES:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Stand			X	
Walk			X	
Sit			X	
Use hands and fingers, to handle or feel			X	
Reach with hands and arms			X	

PHYSICAL ACTIVITIES:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Climb or balance		X		
Stoop, kneel, crouch, or crawl		X		
Talk			X	
Hear			X	
Taste	X			
Smell	X			

WEIGHT and FORCE DEMANDS:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Up to 10 pounds			X	
Up to 25 pounds			X	
Up to 50 pounds	X			
Up to 100 pounds	X			
More than 100 pounds	X			

MENTAL FUNCTIONS:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Compare				X
Analyze				X
Communicate				X
Copy		X		
Coordinate		X		
Instruct		X		
Compute				X
Synthesize		X		
Evaluate			X	
Interpersonal Skills			X	
Compile				X
Negotiate	X			

WORK ENVIRONMENT:	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Wet or humid conditions (non-weather)	X			
Work near moving mechanical parts	X			
Work in high, precarious places	X			
Fumes or airborne particles	X			
Toxic or caustic chemicals	X			
Outdoor weather conditions	X			
Extreme cold (non-weather)	X			
Extreme heat (non-weather)	X			
Risk of electrical shock		X		
Work with explosives	X			
Risk of radiation	X			
Vibration	X			

VISION DEMANDS:	Required
No special vision requirements.	
Close vision (clear vision at 20 inches or less)	X
Distance vision (clear vision at 20 feet or more)	X
Color vision (ability to identify and distinguish colors)	X
Peripheral vision	X
Depth perception	X
Ability to adjust focus	X

NOISE LEVEL:	Exposure Level
Very quiet	
Quiet	
Moderate	X
Loud	
Very Loud	