

CLASSIFICATION DESCRIPTION

TITLE: Network Architect/Administrator

<u>Title of Immediate Supervisor:</u> Manager of Technology	<u>Department:</u> Technology	<u>FLSA Status:</u> Exempt
<u>Accountable For (Job Titles):</u> Network Engineer I, Network Engineer II, System Specialist/Network, System Specialist/Security, , IT Security Analyst	Updated: September 3, 2024	<u>Pay Grade Assignment:</u> Executive Employees Association,

General Summary or Purpose Of Job:

Responsible for the operation of the ISD 709 computer network infrastructure, including LAN/WAN, Internet, network servers, and system security. This responsibility includes the design, implementation, and maintenance of network infrastructure voice and video systems to support curriculum and administrative requirements. Supervises network technical support and security staff , and ensures that highest quality of system reliability, support and services are provided to ISD 709 employees and students. Provides assistance to ISD 709 staff with network-related problems requiring expert troubleshooting and problem analysis, ensuring quality service, with an emphasis on customer satisfaction. Provides monthly summary reports that would identify systems status, failures, deficiencies, and potential system issues. Coordinates, when necessary, direct assistance from manufacturers and vendors, including auditing and checking for accuracy vendor billing.

DUTY NO.	ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)	FRE-QUENCY
1.	Designs, implements, and maintains and oversees the operations of the District's network infrastructure systems, including security, data, voice, and video cabling. Evaluates, analyzes and resolves problems within the District's security, network infrastructure systems. Designs and reviews solutions to ensure a minimum delay and maximum support for curriculum and administration systems serving students and staff using these systems.. Assesses District technology services availability and include recommendation options for redundancy and fail over.	
2.	Serves as the lead technology expert to assist District employees and technical support staff with complex network and security segmentation problems. Handles difficult and complex network problems, that cannot be resolved by other departmental technical support staff.	

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| 3. | Supervises the network technical support staff, by providing documentation, direction, training and assistance with problems encountered. Ensures quality control of systems and services, with an emphasis on customer satisfaction, is provided to District employees using the network infrastructure and attached devices. Performs performance appraisals and resolves personnel problems. Coordinates personnel actions with the Manager of Technology prior to any action being taken. |
| 4. | Researches and maintains knowledge of current network and end-use device technologies to ensure District awareness of state of the art software and hardware. . Assists the Technology Manager with the development of District Technology Plan, Disaster Recovery Plan (DRP), E-Rate Telecommunication Equity Aid and technology grants/funding. |
| 5. | Reviews, tests and determines if technology systems and network hardware/software components meet standards for quality and network compatibility. Applies network modeling data and analysis to estimate data traffic growth for developing long-term network infrastructure planning strategies. Selects equipment for purchase or to be placed on approved standards list for purchasing by the District. |
| 6. | Reviews and utilizes systems to monitor, maintain, and identify potential issues in the design and reliability of the network infrastructure and attached system. |
| 7. | Plans and budgets for future acquisitions and upgrades to equipment and software.. The TCO and ROI models will be used to support changes or purchase of new systems and equipment. |
| 8. | Develops technical specifications (BID's) and requests for proposals (RFP's). Reviews bids and proposals and makes recommendations for vendor selection. |
| 9. | Proposes and maintains District-wide classroom, network infrastructure rooms and cabling standardization for data, wireless, voice and video communications. Ensure that network infrastructure installations in rooms comply with contract specifications and cabling standards. |

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10.	Leads project management and assigns duties within the Network Infrastructure area for the department. Drives efficient communication, vendor product procurement, and project completion, minimizing reliance on external network infrastructure consulting.	
11.	Develops and codes custom software to automate and streamline infrastructure projects, network, phone and security workflows for day-to-day operations involving equipment configuration and individual user service additions or change requests.	
12.	Prepare written monthly reports that identify major systems and track status, failures and potential system issues.	
13.	Develop a professional development plan, including professional development not funded by District funds.	
14.	Performs other related District technology duties, as needed/required.	

Minimum Qualifications: (necessary qualifications to gain entry into the job not preferred or desirable qualifications)

- Bachelor's degree (B.S. or B.A.) from a four-year College or University in Computer Science, MIS, Business Technology plus either two years of experience as a Network Engineer/Network Administrator in a company with a staffing level of 750 or larger
OR
- Two-year Trade/Vocational School certification/degree in Networking/Technology plus four years of experience as a Network Engineer/Network Administrator in a company comparable with a staffing level of 750 or larger
OR
- Six years of experience as a Network Engineer/Network Administrator in a company comparable with a staffing level of 750 or larger
AND
- Two years of supervisory experience.
- Training or experience supporting Cisco Network Infrastructure (telephony, switches, wireless, ISE, etc.) or the equivalent work experience in a Network Support position in a small to medium size company.
- Experience supporting Cisco Infrastructure (telephony, switches, wireless, ISE, etc.)
- Ability to transport oneself to worksites throughout the District in a timely manner.

Desirable Qualifications:

- Two or more of the following Cisco Certifications: CCNA Routing and Switching, CCNA Wireless, CCNP, CCNA Voice
- Two plus years supporting Cisco Telephony/VoIP, Cisco Emergency Responder/E911 and Cisco UCS Server/System
- Two plus years using Microsoft DHCP and two plus years supporting Microsoft DNS
- Previous experience operating and maintaining a Network Access Control System (such as Cisco ISE)

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- Prior K12 work experience

Knowledge Requirements:

Requires knowledge of:

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- Comprehensive working knowledge of network services and related data, voice, and video communications including LAN and WAN.
- Network operations and hardware currently supported by the District.
- Training in VoIP systems support by the District.
- Understanding of networking protocols (TCP/IP, IPv6, VLANs, routing, switching)
- Proficiency with network hardware and software
- Knowledge of network security, cloud technologies, educational technology, and wireless networking
- Educational technology standards and best practices
- Budgeting and financial management

Skill Requirements:

Skilled in:

- LAN and WAN hardware/software (OS), , switches, servers, and multi-layer devices.
- Network design and the core workings (cabling design and standard, OSI model, network protocols, and so forth).
- Identifying and resolving network issues, such as connectivity problems, slow performance, or security breaches.
- Skill in thinking critically and creatively to find solutions to complex network challenges.
- Excellent interpersonal skills for establishing and maintaining effective working relationships with employees, other department staff, contractors, and vendors.
- Supervisory skills, including planning and organizing, interpersonal sensitivity, problem solving, decision-making, flexibility and time management.
- Ability to effectively use a variety of tools, test equipment and diagnostic software, such as protocol analyzers, to assemble, evaluate and repair systems.
- Maintaining confidentiality regarding sensitive data.
- Technical writing and documentation, including diagrams, procedures and policies.

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Physical Requirements: Indicate according to the requirements of the essential duties/responsibilities				
Employee is required to:	Never	1-33% Occasionally	34-66% Frequently	66-100% Continuously
Stand		√		
Walk			√	
Sit			√	
Use hands dexterously (use fingers to handle, feel)				√
Reach with hands and arms		√		
Climb or balance		√		
Stoop/kneel/crouch or crawl		√		
Talk and hear			√	
Taste and smell	√			
Lift & Carry: Up to 10 lbs.		√		
Up to 25 lbs.		√		
Up to 50 lbs.		√		
Up to 100 lbs.	√			
More than 100 lbs.	√			

General Environmental Conditions:

Work is performed under normal office conditions and there are minimal environmental risks or disagreeable conditions associated with the work.

General Physical Conditions:

Work can be generally characterized as:
Light work mostly with monthly IT equipment installation and setup.

Vision Requirements: Check box if relevant	Yes	No
No special vision requirements	√	
Close Vision (20 in. of less)	√	
Distance Vision (20 ft. of more)		
Color Vision	√	
Depth Perception		
Peripheral Vision		

Job Classification History: