



SENIOR NETWORK ENGINEER

Position Summary

The Senior Network Engineer is responsible for troubleshooting, diagnosing and offering remote and direct support to users of the 4J data network and all aspects of 4J technology including clients and customers, applications and middleware, information security, technology infrastructure. This role monitors network access for bottlenecks, security threats as part of providing advanced services for complex WAN and LAN environment for Eugene SD 4J. Specific tasks include: configuration and security for servers (Windows and Linux); desktops; mobile devices; applications; VPN; firewalls; and wireless and wired networks. Additional duties include documentation, programming, monitoring, consulting, troubleshooting, analysis, design, hardware specification, and installation. The position also includes training of district personnel on the topics of data networking and technology.

Supervisory Relationship

This position reports to the Network Services Manager within the Technology Department.

Essential Functions

1. Works with a team to review and provide assistance with deployment, management, administration, and troubleshooting of servers, desktops, hardware, and network infrastructure.
2. Implements and administer security hardware and software installation and upgrades for 4J's WAN and school LANs including intrusion detection systems, intrusion prevention systems, network monitoring, flow analysis, system integrity, risk analysis, security scanning, and other proactive measures.
3. Document work on 4J Network Infrastructure and identifies risks. (e.g. procedures, system level documentation, reports, memos, letters, etc.) as well as incident handling and response.
4. Monitors and analyzes traffic/logs recommending and implementing changes.
5. Participates in long-range planning of district computer networking. Evaluate, assess, and provide recommendations on new products and technologies related to the design and deployment of systems.
6. Manages the development, implementation and maintenance of applications such as VPN, firewalls, wireless, radius, kerberos, server and desktop security configurations.

7. Demonstrates expert knowledge of all TCP/IP protocols, routing protocols, 802.1x, 802.11, VOIP, QOS, and/or emerging network protocols and technologies.
8. Manages project migrations for hardware/software systems for the purpose of security compliance.
9. Assists other personnel as may be required for the purpose of contributing to the efficiency and effectiveness of the work unit.
10. Works under limited supervision following standardized practices and/or methods; leading, guiding, and/or coordinating work through others; and operating within a defined budget.
11. Provides off hours, on-call support as needed in coordination with other Network Services Staff.
12. Collaborate in a cooperative and respectful manner with colleagues.
13. Performs other duties as assigned.

Required Knowledge, Skills, and Abilities

1. Demonstrated experience with TCP/IP analysis, network monitoring, and scanning tools.
2. Demonstrated experience with Unix/Linux or Microsoft Windows Administration.
3. Understanding of Wide Area Networks (WANs), Local Area Networks (LANs), Wireless Local Area Networks (WLANs), TDM technologies, DWDM, CWDM, long haul and short haul gigabit networks over singlemode, multimode, and copper cable plants.
4. Ability to research and troubleshoot complex security issues in timely manner.
5. Programming skills with C, Perl, Shell, Expect, and other languages in a Unix/Linux environment.
6. Knowledge of Cisco, Juniper, Netapp, Vmware, F5, and Fortinet solutions.
7. Ability to work independently or in group situations with other team members.
8. Configuration, management, and troubleshooting of VPN concentrators, firewalls, and linux servers.
9. Knowledge of VOIP installations, configuration, management, and troubleshooting.

10. Excellent communication skills in dealing with diverse stakeholder groups including students, parents, teachers, classified staff and administrators.
11. Ability to work with vendors and knowledge of public agency purchasing policies and procedures.
12. Knowledge of or ability to gain knowledge of public agency purchasing policies and procedures.
13. Strong written and/or documentation skills.

Minimum Qualifications

- Bachelor's degree or equivalent training in computer science or related field.
- Professional certifications preferred.
- Related field or any equivalent combination of education and experience that would provide the above noted knowledge, skills and abilities. Approval is required by Human Resources.
- Valid driver's license required.

Experience

- Three years experience in a large network with roles in security planning, implementation and management.

Work Environment

The usual and customary methods of performing the job's functions require the following physical demands: significant lifting, carrying, pushing, and/or pulling; some stooping, kneeling, crouching, and/or crawling; and significant fine finger dexterity. Generally the job requires 80% sitting, 10% walking, and 10% standing. The job is performed under a generally hazard free environment.

ADDITIONAL INFORMATION	
Employee Unit	4JA - Professional
Pay Grade	Grade 11 /Admin 12 month
Created by	Kim Ketterer, <i>Director of Technology</i> David Langan, <i>Network Services Manager</i>
Approved by	Cydney Vandercar, <i>Director of Human Resources</i>
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