Jordan School District
CLASSIFIED JOB DESCRIPTION

Job Title: **Network Engineer (V33)**	**Job Family:** 03
Department: Information Systems	Lane Placement: **19**
Supervisor's Title: Director of Information Systems Network and Technical Services Manager	Contract: 245 Days
FLSA Classification: Non-Exempt	Hours per Day: 8
Department Approval: *Ken Bird*	Date: *12/5/16*
ADA Review: *Janele Masten*	Date: *12·5·16*
Human Resource Approval: *Bryce*	Date: *11/23/16*
Superintendent Approval: *P. Johns*	Date: *1/5/17*

Original date: 03/09   Revised: 07/14   Revised: 11/16   Revised: _____

GENERAL FUNCTION

Under the supervision of the network and technical services manager, the **Network Engineer** has responsibility for the planning, analysis, design, security, implementation and support of the Wide Area Network (WAN), Local Area Network (LAN), Wireless Local Area Network (WLAN), Virtual Local Area network (VLAN) and Voice Over IP (VoIP) systems and ensure a safe and secure environment for network use by all students, staff and systems in the District. Designs, configures, implements, troubleshoots and maintains all aspects of District network and voice solutions, firewall, intrusion detection/prevention systems, remote access and related services.

> The incumbent is responsible to follow all policies and guidelines as detailed by District policy.

ESSENTIAL FUNCTIONS

- Has responsibility for the planning, analysis, design, security, configuration, implementation and support of the WAN, LAN, WLAN, VLAN and VoIP systems.
- Design, configure, implement, troubleshoot and maintain all aspects of District network and voice solutions, firewall, intrusion detection/prevention systems, remote access and related services.
- Audit, monitor and analyze log files and network traffic analysis tools to identify and resolve vulnerabilities, exploits, or poor network performance.
- Employ the use of network analysis tools (e.g. sniffers, analyzers), technical documentation, and thorough testing procedures in troubleshooting activities and problem resolution.
- Primarily focus on both network/VoIP availability and security to minimize network downtime.
- Coordinate all aspects of network/security and VoIP projects throughout the District as directed.
- Use network performance and security data to identify areas of need and develop network configuration/design recommendations to support anticipated growth and capacity.
- Analyze, direct and review configuration changes to components of district WAN, LAN, WLAN, and security infrastructure using standard change management practices.
- Manage identification of network/security problems and implement and coordinate configuration changes, software updates or equipment repair/replacement to restore/improve service.
- Verify hardware and software compatibility, functionality, reliability and efficiency in all network, VoIP and security projects.
- Implement troubleshooting techniques and evaluate available testing tools and testing procedures to isolate network/security/VoIP problems in order to improve network performance, resolve security breaches, or restore service.
- Communicate (written and oral) effectively with end-users, administrators, carriers and partners in a timely manner. Effective in communicating proposed changes, services and network status to department staff.
- Evaluate and recommend networking/security/VoIP strategies, hardware, software and applications for improved performance and in anticipation of proposed projects. Work directly with carriers/service providers to coordinate implementation.
- Participate and evaluate Business Continuity Planning solutions as they relate to the VoIP, network and data security of the district.

- Oversee the installation of new or upgraded equipment, software or replacement of faulty equipment.
- Provide training and assistance to network technicians and other department staff.
- Maintain, update, review and organize product and procedural documentation and inventory.
- Develop procedures, set standards and recommend work rules and policies for assuring the network and VoIP-related security of all elements of District students, staff and enterprise systems.
- Keep current on advanced networking principles, practices, and protocols e.g., OSI layer 2 and layer 3 operations, 802.11 (wireless), AAA security principles and cybersecurity operation, and provide training to other network and technical support staff.
- Participates in aspects of enterprise systems planning in order to identify potential project demands on existing network and security resources. Serves in an advisory role for all projects that require VoIP access, network access, access to student information and/or personnel information, and serves in a backup role to provide general network technical support.
- Requires late night, weekend work, and on-call status to meet work priorities.
- Travel to schools and other District sites.
- This position requires punctual and regular daily attendance.

NON-ESSENTIAL FUNCTIONS

- Maintain professional competence by reviewing appropriate literature and participating in appropriate organizations and training opportunities.
- Other duties as assigned.

- This description should not be construed to contain every function/responsibility that may be required to be performed by an incumbent assigned to this position.
- Incumbent is required to perform other related functions as assigned. Other related functions can be performed for no more than 20% of an employee's normal workweek (i.e. eight (8) hours per week, or thirty-two (32) hours per month).

QUALIFICATION REQUIREMENTS

- Incumbent must be fingerprinted and clear a criminal background check.
- Will be subject to pre-hire and random drug testing.

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the education, knowledge and experience requirements; the machine, tools and equipment used; and any licenses or certifications required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this position.

Minimum Job Qualifications:

- Requires a High school diploma, GED or equivalent as reviewed by the Department of Human Resources. Verification may be requested.
- Requires a Bachelor's Degree in an Information Technology or Network related technical field of study PLUS five (5) years of job related work experience with demonstrated competence or an equivalent combination of education and experience.
- Preferred certifications: CCDP (Cisco Certified Design Professional), CompTIA's Convergence+ certification, Certified in Converged Network Technologies (CCNT) and Convergence Technologies Professional (CTP) certifications.
- Experience in K-12 school setting preferred.
- Requires experience in Windows and Macintosh environments.
- In depth knowledge of all aspects of telephone, voice mail, call management, call accounting, call routing, dial plans, IP phones, etc.
- Advanced level understanding of SIP, RTP(Real-time Transport Protocol), RTCP (RTP Control Protocols), H.323, TCP/IP, T1/PRI, QoS, and related telephony protocols/standards.
- Strong technical knowledge of VoIP/IP telephony systems, PBXs, FXS/FXO, voice mail, ACDs, interactive voice services, call management systems, and telephony architecture.
- Requires experience with VoIP technologies, LAN/WAN/WLAN devices, Video Technologies, and Network Security.
- Requires demonstrated experience with VoIP/network/computer security devices (e.g., PBX, VCX, firewalls, filters, IPS, Access Control Lists, user-authentication).

o   Requires advanced technical knowledge of industry-standard VoIP, network and security skills, technologies, tools, principles and procedures.
o   Requires experience with project planning, managing and evaluating performance of active network components (e.g., switches, routers, security devices, and wireless access points).
o   Requires the ability to work independently through highly complex technical troubleshooting processes to improve network performance or strengthen security.
o   Requires analysis skills to identify and resolve VoIP/system/network vulnerabilities and resolve potential exploits in a time-sensitive manner.
o   Hands on knowledge of cabling and wiring systems, design, and installation.
o   Requires effective interpersonal skills and ability to work with others to support the concept of teamwork and customer service. Ability to communicate with other security professionals and carriers regarding potentially malicious network activities and to perform troubleshooting, repair, and installs.
o   Ability to make proper work decisions to effectively address multiple priorities at one time. Ability to work well with frequent interruptions.
o   Must be self-motivated and proactive in completing tasks with minimal direction.
o   Requires a valid driver's license that allows incumbent to legally operate a motor vehicle in Utah.

NOTE: **The Administration reserves the right to require specific training for this position. However, depending upon the type and quality of prior work experience and availability of formal training programs, some exchanges can be made between training and experience.**

Machines, Tools & Equipment Used:
o   Standard office equipment and machines.
o   Computer hardware, software, components and related equipment.

Physical Requirements – Not limited to the following:
o   Frequent carrying up to 10 pounds, lifting from floor to waist up to 10 pounds, pushing/pulling up to 50 pounds, pinching, fine motor dexterity, driving a District vehicle and balancing on icy surfaces.
o   Occasional kneeling, climbing ladders, crawling, overhead work, gripping up to 60 pounds and using hand tools.
o   Constant keyboard/mouse use and near vision.

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o   Occasional (0-33%)   Frequent (34-66%)   Constant (66-100%)
o   Physical ability to perform the essential functions listed above with or without reasonable accommodation.
o   Possess the physical, mental and emotional stability to work under stressful condition, including but not limited to: deadlines, contract requirements, inspection requirements and interaction with critical personnel.
NOTE: *This list of essential and marginal functions and of physical requirements is not exhaustive and may be supplemented in accordance with the requirements of the job.*