CENTRAL SCHOOL DISTRICT

Job Title: Network Administrator Occupational Group: Management

& Confidential

Reports to: Assistant Superintendent of Student

Achievement and Educational Services Work Year: 12 months

Board Approval: February 21, 2019

DEFINITION

Under direction, performs highly responsible and complex professional and technical tasks in the planning, design, development, implementation, maintenance and administration of the District's network infrastructure and network applications, server infrastructure, virtualization; and performs related duties as assigned.

QUALIFICATIONS

Education/Certification:

- Desired Graduation from a college with a B.A. or B.S. in Computer Science, Information Systems or a closely related field.
- Required Valid California Driver's license and safe driving record.

Experience:

• Three (3) years of progressively responsible experience in the development, installation and maintenance of networks and network applications; or some combination of education, training and experience that produces the requisite knowledge and ability.

Knowledge of:

- 1. Network architectures, theory and principles of network design and integration, VLANS, including topologies and protocols.
- 2. Principles and practices of advanced network administration, including network monitoring and diagnostic methods, practices and procedures, and the TCP/IP protocol suite.
- 3. Methods and techniques in the installation and configuration of network operating system/TCP/IP routing, layer 2 and layer 3 switching.
- 4. Network management systems, including principles and practices of security management.
- 5. Working knowledge of Microsoft Hyper-V, including principles and practice of server management.
- 6. Operating principles, parameters, uses, capabilities, characteristics and limitations of mid-range computers, servers, network operating systems, PC's and related equipment.
- 7. Working knowledge of VLANS/TCP/IP routing and design to include Aruba OS version 11.x and above.
- 8. Principles and practices of business and technical communications, including techniques in the development of system and user documentation.

Ability to:

- 1. Analyze complex computer system and network issues, identify the reason for network and network device problems, failures and malfunctions and develop effective solutions.
- 2. Develop and recommend cost-effective technical system improvements.
- 3. Monitor network trends and anomalies and make adjustments as required.
- 4. Read, interpret and apply complex technical publications, manuals and other documentation.
- 5. Identify information management and data communication issues and opportunities, analyze problems and alternatives and develop sound conclusions and recommendations.

- 6. Develop, implement and effectively manage procedures and processes, including maintenance of schedules and timetables and preparation of reports on project status.
- 7. Conscientiously preserve the confidentiality of all proprietary and confidential data and information residing in the District, in accordance with Departmental and District policy and State and Federal law.
- 8. Operate computers, network equipment and other related hardware.
- 9. Complete continuing projects while troubleshooting unexpected system problems.
- 10. Work cooperatively with customers in a responsive, helpful, courteous and tactful manner.
- 11. Communicate clearly and concisely, both orally and in writing.
- 12. Establish and maintain effective working relationships with other Information Services team members, managers, administrators, staff and others contacted in the course of work.

DISTINGUISHING CHARACTERISTICS

A Network Administrator performs advanced professional and technical responsibilities in planning, design, implementation, maintenance and administration of multi-platform network operating systems, including participating in the development of technical standards for the configuration and installation of hardware and software systems. The incumbent performs third-level problem analysis and resolution on matters related to the network operating environment and applications. The Network Administrator has overall responsibility for the planning, design, implementation, maintenance and troubleshooting of the District's network and server infrastructure.

ESSENTIAL & REPRESENTATIVE – Essential duties include, but are not limited to the following:

- Provides third-level technical support for the District's network infrastructure, operating systems and
 applications; provides information, technical direction and training to other Information Services staff on
 activities required to implement projects, system hardware and software installations and upgrades, new
 procedures and techniques related to the network infrastructure and server infrastructure including Active
 Directory Group Policies in windows and server environment.
- 2. Installs, configures, upgrades, tests and maintains network equipment and devices, including hubs, routers and switches and wireless networks; provides network server and device support and systems maintenance; works with external technical assistance to resolve hardware and software issues.
- 3. Installs, upgrades, tests and supports network applications software; plans for, configures and tests to ensure their effective integration into the on-line computing environment.
- 4. Performs network administration duties, including establishing and maintaining user accounts, file permissions and other authorization files; maintains system and remote access security to ensure system and data integrity; installs and tests security patches; installs and maintains anti-virus protection software.
- 5. Designs and implements VLAN topologies for securing District computing resources to include administrative computers, servers and other critical network infrastructure and systems. Performs security audits on network and server infrastructure based on industry standards for intrusion detection and intrusion preventions. Makes recommendation for best practices related to network security.
- 6. Assists in monitoring network speed, reliability and performance, using systems management software and other tools and utilities; troubleshoots and resolves complex issues including performance degradation, problems in interactions between hardware, software and network operating systems and hardware/disk failures; monitors and elevates system and network statistics; assesses system capacity issues, evaluates software and other alternatives and recommends system upgrades or replacements; installs and tests operating system releases, upgrades and fixes.
- 7. Develops and reviews documentation of policies, procedures, standards, program solutions and techniques for the design, operation, installation and maintenance of network operating system software; coordinates or participates in review of the technical environment to evaluate and measure system performance and effectiveness.
- 8. Conducts systems analysis and design studies on proposed network application, including effects on user base, impacts on computer resources and personnel needs; develops and maintains procedures for the reasonable security of information systems and data integrity.

- 9. Participates in the evaluation of proposed solutions by attending demonstrations, performing technical research providing technical input to evaluative committees and participating in the evaluation process.
- 10. Prepares various reports, as required, including project schedules and updates, charts and diagrams
- 11. Supervises and manages System Technicians that report directly to the Technician Coordinator.

PRE-EMPLOYMENT PHYSICAL EXAMINATION

This position is subject to Board Policy 4112.4, which requires persons who are offered employment in certain classified positions to submit to pre-employment physical examinations.

WORKING CONDITIONS

Office environment, subject to constant interruptions; employees in this class spend prolonged periods of time at a computer terminal; employee may be exposed to communicable diseases and anti-social/hostile behavior.

Employees typically perform their work in customers' offices, classroom and locations where the noise level is normally quiet. Some repair assignments are performed in close spaces and expose employees to airborne dust and particles and the risk of electrical shock.

PHYSICAL ABILITIES

Dexterity of hands and fingers to operate modern office equipment; sitting or standing for extended periods of time; bending at waist, kneeling or crouching; seeing to read a variety of materials; hearing and speaking to exchange information; reaching overhead, above shoulders and horizontally; ability to lift up to 40lbs.

OTHER REQUIREMENTS

Possession of a valid California Motor Vehicle Operator's License and insurability by the District's liability insurance carrier. Must provide, at own expense, a car and a cellular phone for use during the day and in the event of an emergency.

Central School District does not discriminate in employment on the basis of race, color, ancestry, national origin, religious creed, sex, physical handicap (including AIDS), medical condition (cancer-related) age (over 40), sexual orientation, or marital status and is subject to Title IX of the Education Amendments of 1972, Title VII of the Civil Rights Act of 1964, as amended, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and California Labor Code 1102.1.