

NOVATO UNIFIED SCHOOL DISTRICT

TITLE: SYSTEMS ENGINEER

SALARY: RANGE 50 – CLASSIFIED SALARY SCHEDULE

BASIC FUNCTION:

BASIC FUNCTION: Under the direction of an assigned administrator, perform a variety of specialized duties in the installation, configuration, operation, maintenance, troubleshooting, diagnosis and repair of network systems, servers and related equipment, hardware, software and applications; administer, evaluate and modify network systems and assure proper security, operations and data integrity.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

Perform a variety of specialized duties in the installation, configuration, operation, maintenance, troubleshooting, diagnosis and repair of network systems, servers and related equipment, hardware, software and applications; monitor and evaluate network performance to assure proper functioning; identify problems, concerns and security issues.

Troubleshoot, diagnose and resolve problems with network servers, hardware, software, equipment and peripherals including hubs, routers, switches, printers and other network components; configure and adjust components as needed; repair and replace hardware as needed; administer and maintain network system servers; diagnose and resolve network connectivity issues.

Provide for the effective and efficient back-up, storage, retrieval, customization and archiving of data and files on servers; troubleshoot and resolve network and server-related database problems and malfunctions; assure data integrity; prepare, maintain and replace back-up data and report files; perform system restores and data recovery procedures as needed.

Install, update and upgrade network server and computer software; test applications to assure proper operation; configure hardware and software to assure network access and smooth system operations and enhance network performance and efficiency; troubleshoot and resolve computer hardware, software and operating system malfunctions.

Perform a variety of network administration activities including establishing and maintaining user accounts, passwords, access, permissions, e-mail accounts, user names, directories and designated programs; monitor and maintain network system security; run anti-virus programs; implement antivirus solutions and security patches; troubleshoot and resolve security issues.

Install, configure and assure smooth and efficient operation of network hardware, cabling, wiring, peripherals and components; install, configure, administer and maintain network, e-mail and other system servers; replace cabling, equipment and devices as necessary.

Analyze network needs and develop, implement and oversee network plans and projects; research, design, coordinate and implement data network upgrades and security solutions; estimate equipment, material, hardware, hardware, time and cost requirements for network projects; develop and maintain network documentation related to configuration, changes, policies, procedures and specifications.

Provide technical assistance and user support to District personnel, administrators and others concerning networks; respond to inquiries and provide detailed and technical information concerning related equipment, hardware, software, routing, security, connectivity, configuration, user accounts, malfunctions, applications, practices, techniques and procedures.

Research and evaluate new technologies for possible implementation; confer and collaborate with staff concerning system needs, issues and malfunctions; provide recommendations for and assist in coordinating the purchase and implementation of new technologies including network hardware and software; maintain contact with vendors to request and discuss pricing and product information.

Maintain various records related to network documentation, servers, user accounts and assigned activities; prepare and update network diagrams and technical drawings.

Communicate with personnel and outside agencies to exchange information, coordinate activities and resolve issues or concerns.

Operate a variety of computers, servers, peripherals and specialized software; utilize various hand tools, testers, analyzers and meters; drive a vehicle to conduct work.

Contact vendors to discuss and resolve issues and malfunctions related to network systems, upgrades, software and applications.

Review incoming e-mail for spam and security issues; send appropriate e-mail to recipients; maintain and update lists of authorized and blocked e-mail addresses and websites as directed.

Recommend and participate in the development, maintenance and implementation of network standards, policies and procedures.

Maintain current knowledge of technological advances in network hardware and software.

OTHER DUTIES: Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:**KNOWLEDGE OF:**

- ▶ Practices, procedures and techniques involved in the installation, configuration, operation, maintenance and repair of network systems, servers and related equipment, hardware, software and applications
- ▶ Principles, methods and procedures of operating computers, networks and peripheral equipment
- ▶ Materials, methods and tools used in the operation, installation and repair of computer and network systems. WAN and LAN usage, implementation and network terminology
- ▶ Applicable types of cabling systems, servers, hubs, routers and other related equipment
- ▶ Installation, maintenance and repair of computer hardware, software and peripheral equipment
- ▶ Principles and techniques of systems and network analysis
- ▶ Computer hardware systems, software applications and networking standards utilized by the District
- ▶ Principles, practices, procedures and equipment involved in network administration

- ▶ Interpersonal skills using tact, patience and courtesy. Oral and written communication skills
- ▶ Record-keeping techniques

ABILITY TO:

- ▶ Perform a variety of specialized duties in the installation, configuration, operation, maintenance, troubleshooting, diagnosis and repair of network systems, servers and related equipment, hardware, software and applications
- ▶ Administer, evaluate and modify network systems and assure proper security, operations and data integrity
- ▶ Troubleshoot, diagnose and resolve problems with network servers, hardware and software
- ▶ Perform a variety of network administration activities including establishing and maintaining user accounts, passwords, server and system back-ups, e-mail accounts and internet connectivity
- ▶ Repair and replace hardware as needed
- ▶ Administer, monitor and maintain network system security, servers and databases
- ▶ Configure network and user station settings to assure optimal utilization of system resources
- ▶ Install and configure network hardware, cabling and related equipment
- ▶ Meet schedules and time lines. Work independently with little direction. Maintain records and prepare reports
- ▶ Communicate effectively both orally and in writing; Establish and maintain cooperative and effective working relationships with others

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree in computer science or related field and two years of experience involving the installation, maintenance and repair of network systems and related servers, equipment, hardware and software.

OTHER REQUIREMENTS:

- ▶ Valid California Driver's License
- ▶ DMV Pull authorization for NUSD
- ▶ Department of Justice fingerprint clearance
- ▶ TB clearance

WORKING CONDITIONS:**ENVIRONMENT:**

- ▶ Indoor environment
- ▶ Driving a vehicle to conduct work

PHYSICAL DEMANDS:

- ▶ Dexterity of hands and fingers to operate hand tools, computer keyboards and other assigned equipment
- ▶ Reaching overhead, above the shoulders and horizontally
- ▶ Seeing to read a variety of materials and perform computer repair duties

- ▶ Hearing and speaking to exchange information in person or on the telephone
- ▶ Sitting or standing for extended periods of time
- ▶ Bending, crouching, kneeling and stooping to reach materials
- ▶ Lifting, carrying, pushing or pulling moderately heavy computer equipment

POTENTIAL HAZARDS:

- ▶ Driving a vehicle during adverse weather conditions

Novato Unified School District prohibits, at any district school or school activity, discrimination, harassment, including sexual harassment, intimidation, and bullying, based on actual or perceived race, color, ancestry, nationality, national origin, immigration status, ethnic group identification, ethnicity, age, religion, marital status, pregnancy, parental status, physical or mental disability, sex, sexual orientation, gender, gender identity, gender expression, or genetic information, or association with a person or group with one or more of these actual or perceived characteristics. This shall apply when applicable, to interns, volunteers, and job applicants.

***For questions, concerns or complaints, please contact the District Equity and Title IX Compliance Officer:
Human Resources Administrator; 1015 Seventh Street, Novato, CA 94945; (415) 493-4207;
hradmin@nUSD.org.***