



BERKELEY UNIFIED SCHOOL DISTRICT
Human Resources Department

CLASSIFICATION AND POSITION DESCRIPTION

TITLE:	Network Engineer	REPORTS TO:	Assigned Supervisor
DEPARTMENT/SCHOOL:	Information Technology	CLASSIFICATION:	Non-Administrative Classified Technical
FAIR LABOR STANDARDS ACT CLASSIFICATION:	Non-Exempt	WORK YEAR: HOURS:	12 months/Calendar 2000 7.5 hours per day or duty days/hours as assigned
APPROVED: Board Commission	5/22/2019 6/6/2019	SALARY GRADE:	Schedule: 56 Range: 69

BASIC FUNCTION:

Under the direction of an assigned supervisor, recommend, design, install, maintain and administer local and wide area network (LAN, WAN) computer systems and peripherals; provide technical assistance to department and site personnel in the operation of software, hardware and peripherals; analyze, troubleshoot and correct complex network protocol and security issues.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

- Analyze, isolate and troubleshoot complex hardware, software and network issues including software applications errors, hardware/software errors, communications errors, network address conflicts and other malfunctions
- Deploy and maintain the District's wireless network, backup, and antivirus systems
- Installation and troubleshooting of computer workstations
- Interact with vendors for the recommendation, purchase, maintenance and repair of equipment
- Maintain and configure District Data Center equipment, including: Servers, Virtual Machine infrastructure (VMWare, Hypervisor, etc), cloud computing instances, backup and disaster recovery
- Maintain current knowledge of technological advances in the field
- Maintain network system and infrastructure documentation and architecture diagram
- Maintain District Directory Services (such as Microsoft Active Directory and Google G Suite) user provisioning, maintenance functions, problem resolution, create system/user provisioning scripts, create users, groups, and establish access levels
- Maintain, configure and administer District-wide WAN (wide area network) and LAN (local area network); perform system administration duties; configure workstations for network access; assign IP (internet protocol) addresses, run network cabling; and monitor network security
- Meet with personnel to analyze and determine data communications, hardware and software needs; recommend and implement strategies to improve network performance, security and productivity; assist in the design and development of network services architecture and implementation of new network systems
- Monitors and configures all District network infrastructure, including: configuration of routers and switches on the local and wide area networks, firewall configuration, wireless infrastructure, content filtering, DHCP (dynamic host configuration protocol) servers and IP addressing, DNS (domain name system) servers, and related network systems.
- Monitors energy management and security camera systems, detecting, where possible, network connectivity failures.
- Operate laptop and desktop computers and assigned software; utilize cable testers and power tools
- Operate a motor vehicle in the performance of these duties
- Operates and controls computer based systems, such as but not limited to, energy management systems, security cameras, and access control systems.

Essential Duties (continued):

- Participate in the development and maintenance of security systems for network equipment including internal and external network security
- Provide technical assistance to department and site personnel in the operation of software, hardware and peripherals
- Provide technical assistance for the District's help desk to solve end users' technical requests
- Responsible for administering and configuring network security as related to user accounts, VPN, anti-virus, and password controls.
- Under the direction of supervisor, plan and document network architecture to support current needs of District
- Update and upgrade software/firmware for servers and network equipment
- Works with departments attaching IoT (internet of things) devices to the network to ensure the security of network, data and device security is maintained
- Perform related duties as assigned by supervisor

MINIMUM QUALIFICATIONS

The requirements listed below are representative of knowledge skills and abilities required to satisfactorily perform the essential duties and responsibilities.

Education and Experience: Any combination equivalent to:

- A. Graduation from high school or equivalent. Bachelor’s degree in Information Technology/Information Systems that includes specific coursework in programming and/or network administration.
- B. Five (5) years’ experience in design and sharing of networked hardware and software resources in a large, wide area network environment.

LICENSES AND OTHER REQUIREMENTS:

Valid California Driver’s License and vehicle insurability to comply with District requirements.
 Employment eligibility that includes fingerprint, tuberculosis and/or other employment clearance.
 Incumbents in this classification may be required to speak, read and write in a designated second language.

KNOWLEDGE OF:

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| <ul style="list-style-type: none"> • Applicable laws, codes, regulations, policies and procedures to include State Education Code • Computerized maintenance energy systems management principles as related to the duties of the position. • Correct English usage, grammar, spelling, punctuation and vocabulary • Data entry and retrieval techniques • Desktop and network operating systems, including Microsoft Windows, Linux, Chrome OS, Mac OS, and iOS • Development of system and user documentation • Interpersonal skills using tact, patience, courtesy and professionalism • LAN and WAN network software, hardware, configurations, enhancements, TCP/IP, VLANs, and routing protocols and topologies • Major networking equipment vendor operating systems (Such as: Cisco, HPE/Aruba, Brocade) • Mathematical computations • Methods and techniques for performing connectivity testing and troubleshooting including the use of diagnostic tools and equipment • Modern office procedures and record-keeping techniques | <ul style="list-style-type: none"> • Motor vehicle operation • Network management, backup and print systems, security and anti-virus procedures, video systems, VoIP (voice over internet protocols) systems, clock/speaker systems, and other typical network services. • Operation of a computer and assigned software • Operations, policies and objectives relating to school district activities • Oral and written communication skills • Organizational operations, policies and objectives • Record-keeping and report preparation techniques • Research methods • Server operating systems, hardware, and infrastructure such as: Windows Server, Linux, VMWare, Hyper-v, storage area networks (SAN) and network attached storage (NAS) • Set-up of wireless networks with controllers and non-controller based management systems • TCP/IP addressing, routing, configuration, and troubleshooting methods • Technical aspects of field of specialty • Telephone techniques and etiquette |
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ABILITY TO:

- Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals including policies and procedures and equipment manuals
- Ability to read, write, hear, and speak in English.
- Analyze complex computer system and network issues
- Analyze situations accurately and adopt an effective course of action
- Communicate effectively both orally and in writing
- Complete work with many interruptions
- Compose correspondence and written materials independently
- Configure a variety of network computer equipment
- Determine appropriate action within clearly defined guidelines
- Establish and maintain cooperative and effective working relationships with others
- Identify data communication and information management issues and opportunities
- Implement new applications and programs
- Interpret, apply, explain and assure compliance with rules, regulations, policies and procedures
- Keyboard or input data at an acceptable rate of speed
- Maintain discretion of sensitive, proprietary and privileged information
- Make mathematical computations with speed and accuracy
- Meet schedules and time lines
- Operate a motor vehicle
- Operate a variety of office equipment including a computer and assigned software
- Plan and organize work
- Prepare and maintain accurate records and prepare reports
- Provide technical assistance to department and site personnel in the operation of software, and computer hardware and peripherals
- Read, interpret and apply complex technical publications, manuals and other documentation
- Recommend, design, install, maintain and administer LAN and WAN computer systems and peripherals
- Skill in speaking effectively one-one and/or before internal and/or external groups.
- Skill in writing routine draft instructions, reports and correspondence;
- Understand and follow oral and written instructions
- Work independently with little direction

WORKING CONDITIONS:

ENVIRONMENT:

Constant interruptions

Driving a vehicle to conduct work

Interactions with dissatisfied, hostile and irate individuals

Indoor/Office environment

Subject to demanding time lines and constant interruptions

PHYSICAL ABILITIES:

Bending at the waist; kneeling or crouching to file and retrieve materials

Crawling, climbing, squatting, bending, stretching, and reaching for field service work

Dexterity of hands and fingers to operate a computer keyboard and mouse

Hearing and speaking to present or exchange information in person and on the telephone

Moving, lifting, carrying, pushing, and pulling objects of up to 75 pounds

Operating a computer keyboard for extended periods of time

Reaching overhead and above the shoulders to retrieve hardware or peripherals

Seeing to view monitors and read or compose a variety of written or digital materials

Sitting or standing for extended periods of time

HAZARDS:

Contact with dissatisfied or abusive individuals.

Extended viewing of computer monitor.

Sitting for an extended period of time.