

UNION SCHOOL DISTRICT

CLASS TITLE: NETWORK ENGINEER

BASIC FUNCTION:

Under the direction of the Director of Technology, perform a variety of highly complex and specialized activities involved in the planning, design, set-up, installation, configuration, operation, development, modification, maintenance and repair of Local Area Network (LAN), Wide Area Network (WAN), and other District network systems and related servers, equipment, hardware, software and applications; administer, analyze and assure proper use, connectivity, security and operation of District network systems. Maintains and supports current databases.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

Perform a variety of highly complex and specialized activities involved in the planning, design, set-up, installation, configuration, operation, development, modification, maintenance and repair of LANs, WANs and other network systems and related hardware, software and applications; administer network services, monitor and evaluate network performance, and identify problems or concerns.

Inspect, troubleshoot and diagnose network system, server, hardware, software and application malfunctions to assure smooth running of network systems; resolve network and system problems, malfunctions and connectivity issues; administer, monitor and maintain network system servers; make necessary system alterations and assure proper functioning and integrity of networks and data.

Install, configure and assure smooth and efficient operation of network hardware, cabling, wiring, hubs, routers, switches, wireless access points, communication links, and other network components; repair and replace cabling, equipment and devices as necessary; install, configure and assure smooth and efficient operation of network system servers.

Perform a variety of network administration activities including establishing and maintaining user accounts, passwords, domains, permissions, e-mail accounts, internet connectivity, firewalls and designated programs; analyze and respond to requests for network system and server installations, upgrades and modifications; determine appropriate hardware and software to meet requests.

Install and maintain server and work station software, applications and operating systems; test applications to assure proper operation; configure hardware and software to assure network access and smooth system operations; troubleshoot and resolve operating system malfunctions; install software and application upgrades, patches and updates as needed.

Provide technical assistance, training and user support to District personnel concerning networks and databases; respond to inquiries and provide detailed and technical information concerning network design, equipment, hardware, software, routing, security, connectivity, configuration, malfunctions, applications, practices, techniques and procedures; conduct individual and group trainings.

Install, maintain, repair and assure proper operation of District telephone systems and related equipment; troubleshoot, diagnose and resolve telecommunication system malfunctions; install, set up and replace switches, wiring and other system components; monitor telecommunication traffic patterns and assure optimal service, minimal downtime and smooth system operations.

Prepare user stations and computer equipment for staff use; install and configure software and hardware;

connect work stations to network server and assure proper operation; troubleshoot, diagnose and repair computer workstations and related hardware and software as needed; install and maintain printers, monitors, projectors and other peripherals.

Monitor and maintain network system security; install, run and configure anti-virus and anti-spam programs and filters to prevent and reduce e-mail and internet threats and viruses; implement anti-virus solutions and security patches; troubleshoot and resolve security issues.

Participate in the planning, design, installation, configuration and modification of LANs, WANs and other network systems; estimate equipment, material, hardware, hardware, time and cost requirements for network.

Provide for the effective and efficient storage, retrieval, customization and archiving of data on servers; troubleshoot and resolve network and server-related database problems and malfunctions; assure data integrity; move, compress and delete files to provide for program running as needed.

Monitor, control and assure proper network usage, security, traffic, resource allocation, bandwidth and connectivity; analyze and correct security-related connectivity issues; install and maintain content filtering hardware and software.

Communicate with District personnel and various outside agencies to exchange information and resolve issues or concerns.

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

Research and evaluate new technologies for possible implementation; confer with users concerning system needs; provide recommendations concerning the purchasing and implementation of new technologies including network hardware and software.

Maintain various records related to network systems, servers, hardware, software, installations and assigned activities; maintain and update diagrams of District network infrastructure and communication links.

Attend mandatory trainings as required by your position.

OTHER DUTIES:

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:**KNOWLEDGE OF:**

Practices, procedures and techniques involved in the planning, design, set-up, installation, configuration, operation, development, modification, maintenance and repair of LANs, WANs and other network systems and related hardware, software and applications;

Principles, methods and procedures of operating computers, networks and peripheral equipment;

Network utilities and design and program applications;

Networking standards, requirements, layout and infrastructure related to educational organizations;

Materials, methods and tools used in the operation, installation and repair of computer and network systems;

WAN and LAN usage, implementation and network terminology;

Principles, theories and techniques of network design;

Applicable types of cabling systems, servers, hubs, routers and other related equipment;

Installation, maintenance and repair of computer hardware, software and peripheral equipment;

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Previously Network Technician

Principles and techniques of systems and network analysis;
Computer hardware systems, software applications and networking standards utilized by the District;
Documentation, record-keeping and report preparation techniques;
Interpersonal skills using tact, patience and courtesy; and
Oral and written communication skills.

ABILITY TO:

Perform a variety of highly complex and specialized activities involved in the planning, design, set-up, installation, configuration, operation, development, modification, maintenance and repair of LANs, WANs and other network systems and related hardware, software and applications;
Administer, evaluate and modify network systems to assure proper operation and connectivity;
Troubleshoot, diagnose and resolve problems with computers, networks, hardware, software and related peripherals;
Participate in the planning, design, installation, configuration and modification of LANs and WANs;
Install and assure proper operation of server and work station software and applications;
Perform a variety of network administration activities including establishing and maintaining user accounts, passwords, security applications, e-mail accounts and internet connectivity;
Repair and replace network hardware as needed;
Maintain network system security, servers and databases;
Provide for effective and efficient storage, retrieval, customization and archiving of data;
Install, configure and document network hardware, cabling and related equipment;
Meet schedules and time lines;
Work independently with little direction;
Maintain various records related to work performed;
Communicate effectively both orally and in writing;
Establish and maintain cooperative and effective working relationships with others; and
Maintain Regular Attendance.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree and three years experience involving the planning, design, installation, maintenance and repair of network systems and related servers, equipment, hardware and software.

LICENSES AND OTHER REQUIREMENTS:

Valid California driver's license
Industry Standard Certifications such as CCNA and MCSE, preferred

WORKING CONDITIONS:

ENVIRONMENT:

Indoor work environment with high noise and distraction levels
May work in outdoor environment
May work in small spaces such as ceilings for wiring
Driving a vehicle to conduct work

PHYSICAL DEMANDS:

Visual ability to read handwritten or typed documents and the display screen of various office equipment and machines;

Board Approved 2/8/10
Previously Network Technician

Ability to conduct verbal conversation in English and, possibly, a designated language;
Hear normal range verbal conversation (approximately 60 decibels);
Sit, stand, stoop, kneel, bend and walk;
Sit for sustained periods of time;
Climb slopes, stairs, steps and ladders;
Lift up to 50 or more pounds;
Carry up to 50 or more pounds;
Exhibit full range of motion for shoulder external rotation and internal rotation, shoulder abduction and adduction, elbow flexion and extension, shoulder extension and flexion, back lateral flexion, hip flexion and extension and knee flexion.
Operate office machines and equipment in a safe and effective manner;
Ability to work in a safe and effective manner in the following: at various elevated heights on ladders, roofs, and in restricted spaces;
Demonstrate manual dexterity necessary to operate calculator, typewriter and/or computer keyboard at the required speed and accuracy; and
Conduct frequent repetitive arm, hand and body motion.

Disaster Service Worker

CA Government Code 3100. It is hereby declared that the protection of the health and safety and preservation of the lives and property of the people of the state from the effects of natural, manmade, or war-caused emergencies which result in conditions of disaster or in extreme peril to life, property, and resources is of paramount state importance requiring the responsible efforts of public and private agencies and individual citizens. In furtherance of the exercise of the police power of the state in protection of its citizens and resources, all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law.