Network Engineer

Purpose Statement

The job of Network Engineer is done for the purpose/s of designing, configuring, installing, maintaining, and repairing YCOE local area network (LAN) and the county wide area network (WAN) subsystems and servers, and all related network operations; assuring access and network connectivity with local and remote sites, districts, and the Internet; and assuring network security and network monitoring.

This job reports to Director, Information and Technology Services

Essential Functions

Assists with administration of systems and servers related to district LAN and WAN (e.g. email systems, accounts, print queue, workstation ID, IP assignments, computer labs, classroom computers, VOIP, security, antivirus, spyware, etc.) for the purpose of ensuring availability of services to authorized users.

Collaborates with a variety of internal and external parties (e.g. district personnel, programmers, programmer analysts, database administrators, users, etc.) for the purpose of providing and/or receiving information and ensuring project success.

Configures and maintains local and wide area network operations and all enterprise servers (e.g. servers, routers, network security, etc.) for the purpose of ensuring complete and accurate backup of system data.

Coordinates with vendors (e.g. maintenance agreements, software and hardware upgrades, and problems with and enhancements or modifications to their products, etc.) for the purpose of maintaining best possible network services for YCOE.

Determines configurations (e.g. existing or anticipated network equipment, etc.) for the purpose of providing professional planning, installation and maintenance of network applications.

Develops systems policies and procedures for the purpose of assuring system operation and security of data, equipment and facilities.

Develops county-wide enterprise network (e.g. installation, setup and maintenance of hubs, routers and switches, etc.) for the purpose of ensuring the ability to administrate web, file, e-mail, domain name other enterprise servers.

Installs network (client and server) software on a variety of platforms (e.g. service packs, application software, operating software, hardware upgrades, etc.) for the purpose of upgrading and maintaining District network systems.

Monitors system management functions (e.g. new users, groups, accounts, peripherals, software upgrades, network privileges, permissions, etc.) for the purpose of integrating processes according to established rules and regulations.

Oversees network security (e.g. user access and authentication, network monitoring, directing local and wide area network traffic, intrusion detection, data integrity of YCOE information systems, etc.) for the purpose of providing necessary network security processes for YCOE.

Participates in meetings, workshops and/or trainings for the purpose of conveying and/or gathering information required to perform job functions.

Performs installing, configuring, and maintaining network services and equipment (e.g. switches, routers, servers, etc.) for the purpose of meeting district network systems requirements.

Prepares a variety of materials (e.g. procedures, system level documentation, reports, memos, letters, etc.) for the purpose of documenting activities, providing written reference and/or conveying information.

Prepares time and cost estimates (e.g. development, modification, and implementation of new or existing network related systems, etc.) for the purpose of providing implementation of necessary improvements.

Provides technical communications assistance (e.g. to employees and departments throughout the YCOE and to local school districts, etc.) for the purpose of determining best practices for utility in YCOE local area networks and county wide area networks.

Researches new technology (e.g. review of hardware and software packages for suitability; cost and ease of use, etc.) for the purpose of assuring compatibility with existing systems and applicability to County systems.

Responds to emergency situations for the purpose of providing assistance to all IT functionality.

Responds to inquiries from a variety of sources (e.g. staff, administrators, school site personnel, outside vendors and service providers, etc.) for the purpose of providing technical assistance, advice and support.

Reviews system logs daily (e.g. warning or error alerts, etc.) for the purpose of assuring proper and effective implementation of new servers, applications, and systems.

Serves as a technical resource to department and district staff for the purpose of providing information and/or advice regarding active or planned projects.

Trains YCOE and District Information Technology staff (e.g. network training, etc.) for the purpose of ensuring professional operation of LAN and WAN.

Other Functions

Performs other related duties as assigned for the purpose of ensuring the efficient and effective functioning of the work unit.

Job Requirements: Minimum Qualifications

Skills, Knowledge and Abilities

SKILLS are required to perform multiple, technical tasks with a need to periodically upgrade skills in order to meet changing job conditions. Specific skill based competencies required to satisfactorily perform the functions of the job include: planning and managing projects; preparing and maintaining accurate records including developing and maintaining time estimates and schedules; reading entity-relationship diagrams; supervising staff and project groups; and using pertinent software applications.

KNOWLEDGE is required to perform advanced math; read technical information, compose a variety of documents, and/or facilitate group discussions; and analyze situations to define issues and draw conclusions. Specific knowledge based competencies required to satisfactorily perform the functions of the job include: current generation and legacy application programming languages; system design; process and data modeling techniques; database theory; technologies and tools, benefits and limitations of technology; and project management; server design; network hardware and software; data processing operations; and data communication systems and protocols.

ABILITY is required to schedule a number of activities, meetings, and/or events; often gather, collate, and/or classify data; and consider a variety of factors when using equipment. Flexibility is required to work with others in a wide variety of circumstances; analyze data utilizing defined but different processes; and utilize equipment under a variety of conditions for multiple purposes. Ability is also required to work with a diversity of individuals and/or groups; work with a variety of data; and utilize a wide variety of types of job-related equipment. Problem solving is required to analyze issues and create action plans. Problem solving with data requires analysis based on organizational objectives; and problem solving with equipment is significant. Specific ability based competencies required to satisfactorily perform the functions of the job include: setting priorities; communicating effectively with persons of varied technical background; meeting deadlines and schedules; operating a variety of highly technical network and PC computer equipment; understandung functions and limitations of assigned duties; conducting assigned responsibilities with the understanding of YCOE; cooperating with others; and working with frequent interruptions.

Responsibility

Responsibilities include: working independently under broad organizational guidelines to achieve unit objectives; leading, guiding, and/or coordinating others; monitoring budget expenditures. Utilization of significant resources from other work units is sometimes required to perform the job's functions. There is some opportunity to significantly impact the organization's services.

Work Environment

The usual and customary methods of performing the job's functions require the following physical demands: some lifting, carrying, pushing, and/or pulling, some climbing and balancing, some stooping, kneeling, crouching, and/or crawling and significant fine finger dexterity. Generally the job requires 70% sitting, 20% walking, and 10% standing. The job is performed in a generally hazard free environment.

Experience: Job related experience within a specialized field is required.

Education: Bachelors degree in job-related area.

Equivalency: Industry Certifications and prior experience in enterprise related network and server operations.

Required Testing:	**Certificates and Licenses**
	Valid Driver's License & Evidence of Insurability
Continuing Educ. / Training:	**Clearances**
Maintains Certificates and/or Licenses	Criminal Justice Fingerprint/Background Clearance
	Tuberculosis Clearance

FLSA Status	**Approval Date**	**Salary Grade**
Non Exempt	2/14/2018	65