

**KERN COUNTY SUPERINTENDENT OF SCHOOLS
APPROVED AUGUST 2004
RANGE: 55.0
TECHNICAL/SPECIALIST SERVICES SERIES
CLASSIFIED - OVERTIME EXEMPT
CODE: 2,6,8**

**CSIS NETWORK SYSTEMS SPECIALIST
(California School Information Services)**

DEFINITION

Under general supervision, plan and execute tasks supporting the operation of a wide area network supporting program needs of both internal staff and external clients, and a local area network supporting internal staff.

As a senior technical staff member, the CSIS Network Systems Specialist may lead and/or assist in technical and procedural efforts that establish, document and carry out detailed services to critical KCSOS program participants.

Includes the design and coordination of hardware and software tools for the collection and transfer of secure data packets; the deployment and maintenance of a local area network, hardware and software for data, file and peripheral sharing; ensuring maximum uptime, including implementing operational diagnostics, monitoring system efficiency and ensuring the integrity of the program network and web services; plus providing training and technical support to other internal staff members.

The CSIS Network Systems Specialist is expected to assist in strategic planning and operational strategies based on appraisals of network effectiveness as well as available and emerging technologies.

EXAMPLES OF DUTIES

Systems analysis for networking needs, and engineering of both wide and local networks supporting program needs;

implement and maintain host services such as domain name servers, e-mail servers, secure HTTP servers, newsgroup and list servers, and other forms of data communications;

establish standards for operational efficiency and effectiveness of network and services;

independently avert hardware and software failures and degradation of services;

identify causes of outages and restore services in a timely manner;

analyze program needs as they relate to network infrastructure, hardware, and software;

plan for, recommend, build, configure and deploy hardware including servers, routers, hubs, switches;

deploy and configure off-the-shelf and custom software;

assist programmers with installation planning, testing and implementation of new releases of system software and hardware;

provide and perform necessary systems management functions including managing accounts for access to the network and its services, maintaining backups and offsite rotation, service pack and patch management, product licensing history and information;

monitor the network for accidental or intentional misuse of network and services, provide preemptive measures against unauthorized use or abuse;

coordinate and participate in training of internal program staff and staffs of other agencies as directed;

provide timely and accurate reporting of network issues to internal management, and as directed to key stakeholders and other entities;

reports to include observations of operational effectiveness and any needs for change or general system improvement;

establish and maintain effective relationships with providers of servers, networking devices, products and tool sets, and with the technical representatives of key program stakeholders;

document, report and follow-up with software and hardware vendors regarding problems with and enhancements of or modification to their products;

documents operations and procedures;

serve as a cooperative and contributing member of the program team;

complete other duties as assigned.

QUALIFICATIONS

Knowledge of:

Thorough knowledge of network topologies and technologies typically employed in local and wide area networks;

network capabilities, capacities and limitations of computer hardware and communications devices including routers, switches, concentrators, and wiring;

advanced principles, practices and trends in networking technology, and of Internet based systems issues and concepts;

exposure to software development lifecycle and to quality assurance and quality improvement concepts are desirable;

telephony is highly desirable.

Ability to:

Proven ability to effectively prioritize projects and work on concurrent tasks and with multiple entities;

work within formal organizational structures as well as with flexible teams;

plan and manage limited hardware resources;

build and manage constructive inter-personal relationships;

excellent written and verbal communications skills.

Experience:

A minimum of two years combined experience in designing for, development of, implementing and managing local and wide area networks and servers is necessary.

A minimum of two years of hands-on experience with the configuration and maintenance of servers is necessary.

A minimum of two years hands-on experience in hardware and software troubleshooting, diagnostics, and performance tuning is necessary.

A minimum of two years experience in SNMP management, using and maintaining Internet Protocol (IP) addressing and subnet masking is necessary.

Demonstrable progress in job assignments is expected.

Desirable experience includes:

Experience in the configuration and management of host services including HTTP, SMTP is highly desirable.

Three or more years of communications technology assignments in a Windows environment are highly desirable.

Experience in telephony is desirable.

Project management experience is desirable.

Experience in a service-oriented, Management Information Systems (MIS) or Information Technologies (IT) environment is desirable.

Education:

Requires graduation from an accredited four-year college or university with a major in computer science, information technologies, or a related field.

Work experience resulting in an equivalent knowledge base may be substituted for the major requirement.

Some positions may require proof of privately owned automobile insurance and possess a valid California Motor Vehicle operator's license.

Fingerprint clearance by both the Federal Bureau of Investigation and the California Department of Justice is a condition of appointment after all other required job conditions have been met.

This position is overtime exempt and has a probationary period of one year.

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