

KERN COUNTY SUPERINTENDENT OF SCHOOLS
REVISED/APPROVED JANUARY 2025
RANGE: 55.0
CLASSIFIED
CODE: 7

NETWORK SYSTEMS ENGINEER II

DEFINITION

Under the general direction the Network Systems Engineer II will provide engineering support by solving technical support tickets, routine server and systems administration, assisting with network configuration, and technology project tasks.

EXAMPLES OF DUTIES

Resolve service tickets within Service Level Agreements determined by leadership;

implement basic Linux and Windows server installation and operations including the services hosted by those systems;

perform physical installation of technology hardware as needed including servers, network devices, wireless access points and radios, and supporting hardware;

implement and support virtualization environments including configuration and daily operations of virtual systems;

basic administration of backup and restore operations for files, services, and whole systems;

implement and support network services such as DNS, DHCP, HTTP/HTTPS, SNMP, and other TCP/IP services;

networking using routers and switches with network communications structured by copper, fiber optic cabling, and wireless systems;

monitor and diagnose problems related to the local-area and server environment using various management tools and techniques;

support client operating systems such as, Windows Linux, Mac, and ChromeOS as well as any inventory, patching, imaging, or related management systems;

support of networked devices such as printers and scanners, and implementation of servers and services supporting such devices;.

administration of appropriate access to services by management of accounts, permissions, group membership, and setup of Role Based Access Controls within application and services;

administration of e-mail services including mailbox management, e-Discovery, and use of Powershell for complex tasks;

implementation and support of VoIP phone system and configuration, underlying servers and circuits, and additional telephony needs for related services such as E911;

administration of NVRs, DVRs, and VMS services including camera devices, configuration, and supporting networks;

maintain technology spaces such as MDFs, IDF's, and datacenters for cleanliness and adherence to department standards;

implement and maintain scripts to automate various processes and administrative functions across a variety of systems;

participate as needed with incident response for technical tasks within assigned duties;

utilize Change Management as appropriate and update the underlying CMDB and asset data as needed;

creation and updating of procedure documentation, maps and diagrams, and training material as directed;

administration of on-premise and cloud hosted directory services and identity or policy management systems including, but not limited to, Active Directory, AzureAD, Office365, and Google Workspace;

implement the technology planning and installation needs of school districts through project tasks as assigned;

provide training to fellow engineers and technical staff for cross-training and sharing of knowledge;

other technology engineering related duties as assigned.

QUALIFICATIONS

Knowledge of:

Management of networking configured for aggregation, redundancy, VLANs, and routing equivalent to an engineer level course for well-known Network Operating Systems such as Cisco iOS or Junos;

traditional Ethernet technologies such as spanning tree, RIP, OSPF, EIGRP;

modern wireless LAN technologies, authentication methods, and security best practices;

network cabling standards for dealing with a variety of common technologies and circumstances such as STP, proper environment rated cables, fiber optics, and termination;

administration and security best practices of operating systems used by the organization such as Windows, Linux, Mac, and ChromeOS, and common services hosted on those systems.

Ability to:

Communicate effectively in public, in conference, and in written materials;

travel to and work at various locations and be able and equipped to communicate as necessary with supervisor regarding whereabouts and task updates;

willingness to stay abreast of trends, innovations and practices in both computer and networking technology, including hardware and software;

maintain the knowledge and ability to provide coverage for other engineers for brief periods as required;

perform task-based work with minimal supervision;

lift 50 pounds, work with hands and arms overhead, climb ladders, bend, stoop and crawl, and hear and see sufficiently to perform the duties listed above.

Experience:

Must have four (4) years of combined experience in a technical role managing servers and networks.

Education:

Graduate of a four year college or university, with a bachelor's degree in computer science.

equivalent experience in an applied setting regarding the above technology can be substituted for the college degree.

Conditions of employment:

Some positions may require proof of privately owned automobile insurance and possession of a valid California Motor Vehicle operator's license which must be maintained for the duration of the assignment.

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.

Must present verification of completion of Child Abuse Mandated Reporter training or obtain verification within six (6) weeks of hire and annually thereafter, as required by the California Child Abuse and Neglect Reporting Act.

This position has a probationary period of six months or 130 days, whichever is longer.

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