

KERN COMMUNITY COLLEGE DISTRICT

CLASS TITLE: NETWORK ENGINEER

BASIC FUNCTION:

Under the direction of the Assistant Director of Information Technology, provide support for KCCD's network infrastructure including network switches, wireless networks, Voice-over-IP (VOIP) telephone systems, site and building cable plants, network operating systems and related services. In addition, assist with and participate in the ongoing assessment, modification and standardization of KCCD's enterprise network infrastructure and associated configuration management practices.

REPRESENTATIVE DUTIES:

Work with IT staff to troubleshoot and resolve networking problems in a timely manner

Prioritize and respond to support requests to ensure IT network service needs are being met

Support VOIP systems infrastructure and processes including but not limited to voice switches, client software, management software, E911, monitoring, problem determination and resolution, billing and MACs (moves, adds, changes)

Work with IT and Facilities staff to provide input and carry out assigned projects related to district wide construction planning and implementation of Network infrastructure

Insure effective patching and anti-virus efforts to keep all client computers properly protected from security threats

Research and implement IT security measures required to keep KCCD's Network infrastructure secure

Implement and maintain backup and disaster recovery plans for District Wide Network infrastructure

Research, implement and utilize appropriate network management tools for Network monitoring, troubleshooting, traffic prioritization, usage reporting and capacity planning purposes

Maintain vendor contacts, partnerships and relationships related to the implementation and support of KCCD's Network infrastructure

Develop and maintain Help Desk Knowledge Base articles for respective areas of responsibility

Maintain accurate inventory and replacement planning information for areas/systems of responsibility

Automate, innovate and standardize Network hardware, software and support practices to continually improve the effectiveness of IT Network Operations

Support key IT infrastructure associated with proper operation of Data Centers, MDFs and IDF district wide (i.e. Monitoring, HVAC, Physical Security, UPSs/Generators, Fire Suppression)

Develop and maintain documentation for KCCD's Network infrastructure

Assist with the development, documenting and prioritizing long-term strategies for meeting KCCD's Network infrastructure needs

Assist with network design, capacity planning and performance management

Develop, document and implement appropriate Network infrastructure standards, policies, procedures and management practices

Identify, recommend and implement changes to support process that need improvement

Receive, prioritize and respond to Help Desk service tickets for LAN/WAN related issues

Assist with management of hardware and software maintenance contracts required to effectively support KCCD's Network infrastructure

Serve as a backup on as needed basis in the support of KCCD's WAN, LAN and Video Conferencing infrastructure

Keep current with the latest developments in networking technologies

Document assignment status as required; apprise management of problems or unexpected resource requirements

Perform related duties as assigned

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

- Ethernet, TCP/IP, IPV4, IPV6
- LAN performance monitoring, capacity planning and methodologies
- LAN/WAN Network management systems
- Packet capture and analysis
- Installation, configuration and management of network infrastructure including switches, wireless infrastructure, routers and VOIP telephone systems
- Extreme Networks and Aruba Networks technologies
- Operating systems such as Microsoft Windows XP, Windows 7, and Windows 2003/2008 server

- IP addressing and subnetting practices
- Remote Access technologies (i.e. Citrix)
- Network management industry best practices
- Network troubleshooting and problem resolution
- Cabling standards, methods and procedures
- Principles of effective project management.
- Traffic prioritization and management concepts such as QOS, bandwidth shaping and bandwidth compression and bandwidth acceleration
- Effective customer service skills and practices

ABILITY TO:

- Plan, organize, coordinate and implement Network related projects
- Manage a wide array of Network infrastructure
- Effectively interact and negotiate with vendors
- Effectively prioritize and execute projects
- Effectively participate in working groups or committees
- Prepare and follow work plans and time lines for projects and proposed systems
- Learn new skills and adapt to changes in technology
- Continuously update personal knowledge of industry-leading LAN technology
- Communicate effectively both orally and in writing
- Budget management principles
- Establish and maintain cooperative and effective working relationships with others

EDUCATION AND EXPERIENCE

Any combination equivalent to: Associate's degree **AND** 4 years of increasingly responsible experience in the support of LAN infrastructure.

OR

High school diploma, GED or equivalent certificate of competency **AND** 6 years of work experience such as described in the representative duties section of the specification.

OR

A Bachelor's degree in a related field of study **AND** 2 years of work experience such as described in the representative duties section of the specification.

Preferred:

At least 2 years experience with Extreme Networks, Aruba Networks, cabling infrastructure and IT Security in a multi-site environment. Experience deploying and supporting VOIP telephone systems in a multi-site environment desirable.

WORKING CONDITIONS:

ENVIRONMENT:

Office environment.

Driving a vehicle to conduct work

PHYSICAL DEMANDS:

Incorporated within one or more of the previously mentioned essential functions of this job description are essential physical requirements. The chart below indicates the percentage of time spent on each of the following essential physical requirements.

1. Seldom = Less than 25 percent

3. Often = 51-75 percent

2. Occasional = 25-50 percent

4. Very Frequent = 76 percent and above

4 a. Ability to work at a desk, conference table or in meetings of various configurations.

2 b. Ability to stand for extended periods of time.

4 c. Ability to sit for extended periods of time.

4 d. Ability to see for purposes of reading printed matter.

2 e. Ability to hear and understand speech at normal levels.

4 f. Ability to communicate so others will be able to clearly understand a normal conversation.

2 g. Ability to bend and twist.

2 h. Ability to lift 25 lbs.

2 i. Ability to carry 25 lbs.

4 j. Ability to operate office equipment, computer or related peripherals.

3 k. Ability to reach in all directions.

This job description is intended to describe the general nature and level of work being performed. It is not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of individuals so classified.