# SACRAMENTO CITY UNIFIED SCHOOL DISTRICT Position Description

TITLE: Network Specialist III CLASSIFICATION: Classified Non-Management

(SEIU/Professional)

SERIES: Network Specialist FLSA: Non-Exempt

JOB CLASS CODE: 9566 WORK YEAR: 12 Months

**DEPARTMENT:** Technology Services **SALARY:** Range 74

Salary Schedule C

**REPORTS TO:** Assigned Supervisor **BOARD APPROVAL:** 10-06-97

**HR REVISION:** 03-23-12

## **BASIC FUNCTION:**

Perform expert, technical network duties, and improve the backbone computer network that supports mission-critical district information systems; proactively improve the overall advancement of the district-wide network.

### **DISTINGUISHING CHARACTERISTICS:**

The Network Specialist III is the most knowledgeable and the most capable of any of the network specialists, and performs all of the duties of an entry-level Network Specialist I and II in addition to the duties listed below. The Network Specialist III has a scope of knowledge and capability that includes the entire network and its environment. When a Network Specialist III functions in a team lead or project leader capacity, the Network Specialist III will provide technical guidance to other network specialists.

REPRESENTATIVE DUTIES: (Incumbents may perform any combination of the essential functions shown below [E]. This position description is not intended to be an exhaustive list of all duties, knowledge, or abilities associated with this classification, but is intended to accurately reflect the principle job elements.)

Assist sites and departments in the day-to-day operation of local area networks; install network workstations, and configure workstations based on standard district configurations. **E** 

Assist end-users in defining networking requirements, and work with other technical personnel and outside vendors in designing networking solutions; coordinate the installation of network infrastructure, cabling, and adapters with other district personnel and outside contractors. **E** 

Monitor, improve, refine, and document server capabilities and procedures such as server backups, disk space management, processor utilization, inventory, security, and system management. **E** 

Install network file servers including network operating system, network utilities, and peripheral devices; provide technical guidance to Network Specialists I and II and Technology Support Specialists. E

Participate in the development of solutions that support the efficient functioning and ongoing management of the district's network infrastructure and are consistent with district standards. As solutions become robust and procedural, turn over execution to Network Specialists I and II, Technology Support Specialists, or site personnel, as applicable; document solutions and train as needed. E

Expand on system-level understanding of network and server applications; improve the efficiency and effectiveness of network support.  ${\bf E}$ 

Expand and enhance district-wide area network (WAN) to provide access to external information sources on a state, national, or global basis; collect pertinent WAN and LAN statistics for network performance analysis and capacity planning.  $\bf E$ 

Perform trend analysis of network bandwidth utilization; design network workload tests to objectively evaluate network performance; perform capacity planning for network resources. **E** 

Constantly improve network support for district information systems; improve network performance; lift, move, reposition, and connect light to moderately heavy network and workstation equipment components according to safety regulations. **E** 

Act as technical network expert during the development of information systems that will use network services and resources; evaluate and implement new technologies for networks; characterize network usage with respect to organizational elements, information systems, and individual users so that appropriate technical and organizational strategies may be developed to mitigate potential resource usage. **E** 

Work with school improvement initiatives that close student achievement gaps between racial, ethnic, and economic groups by working with all of the diverse communities. **E** 

Perform related duties as assigned.

## TRAINING, EDUCATION, AND EXPERIENCE:

Experience with a broad range of computer hardware and software, which includes the installation, maintenance, and enhancement of hardware and software on local area networks (LAN). Experience in planning and supporting network and computer infrastructure. Experience supporting end-users, both in functional and administrative areas, is essential. Possess strong technical experience installing network software on servers and workstations. Experience managing a network, including switches, cache memory management, storage device management, backup and recovery systems, user standardization, and problem resolution.

#### **AND**

Any combination equivalent to: bachelor's degree with an emphasis in information systems, network management, or computer science (computer operation, information systems, or network operations), and six years general technical experience in installing and maintaining computer networks to include network management. At least two years of current duties must be at the Network Specialist II or equivalent level. Network management experience must include remote access to LAN services, network management tools, and various network protocols including, but not limited to, Transmission Control Protocol/Internet Protocol (TCP/IP).

### LICENSES AND OTHER REQUIREMENTS:

Hold a valid California driver's license, and provide personal automobile and proof of insurance. Must be available for mandatory overtime during critical times. Alternative work schedules and/or telecommuting may be mandatory to prevent end-user interference.

Desired industry certifications and knowledge:

- <u>Certifications</u>: Microsoft Certified Systems Engineer (MCSE), Cisco Certified Network Associate (CCNA), Cisco Certified Network Professional (CCNP), Cisco Certified Internetwork Expert (CCIE), Certified Novell Engineer (CNE)
- Systems: Windows, Apple, Cisco Systems
- <u>Networking</u>: Switches, Routers, Hubs, Servers, Cables, Racks, Firewalls, LAN, WAN, TCP/IP, Domain Name System (DNS), User Datagram Protocol (UDP), Latency, Voice Over Internet Protocol (VoIP), Quality of Services (QoS), Enhanced Interior Gateway Routing Protocol (EIGRP), Border Gateway Protocol (BGP), Open Shortest Path First (OSPF), Next Hop Resolution Protocol (NHRP), Asynchronous Transfer Mode (ATM), Point-to-Point Protocol (PPP), Multiprotocol Label Switching (MPLS)

#### **KNOWLEDGE AND ABILITIES:**

### KNOWLEDGE OF:

Problem solving skills.

Technical expertise on LAN, WAN, network operating systems, network cabling topologies, and industry standards and practices.

Methodologies for managing technical change on a proactive basis.

Router and switch configuration.

Data systems back-up.

TCP/IP and wireless standards.

Oral and written communication skills.

Technical aspects of field of specialty.

Record-keeping techniques.

Health and safety regulations.

#### **ABILITY TO:**

Perform the basic function of the position.

Develop network procedures and documentation that others can execute.

Perform troubleshooting analysis of network infrastructure, servers, workstations, and associated systems.

Make technical trade-off decisions that consider logistical and operational factors with cost factors and standardization efforts.

Function in a team environment to balance technical factors with other organizational factors.

Coordinate with other technical personnel to arrive at optimum solutions.

Use commonly available office automation tools.

Be available for mandatory overtime during critical times.

Work in a manner and at a time so as not to interfere with customer productivity.

Alternative work schedules and/or telecommuting may be mandatory to prevent end-user interference.

Work with school improvement initiatives that close student achievement gaps between racial, ethnic, and economic groups by working with all of the diverse communities.

Lift, move, re-position, and connect light to moderately heavy network and workstation equipment components according to safety regulations.

Effectively work with program managers and site personnel.

Meet state and district standards of professional conduct as outlined in Board Policy.

### **WORKING CONDITIONS:**

## SAMPLE ENVIRONMENT:

Office and school site environment; drive a vehicle to conduct work; constant interruptions.

#### SAMPLE PHYSICAL ABILITIES:

Sit for extended periods of time; walk and stand to identify and diagnose PC and LAN problems; dexterity of hands and fingers to operate a computer keyboard; reaching overhead, above the shoulders, and horizontally; bend at the waist or crouch to troubleshoot and connect cables; hear and speak to exchange information in person or on the telephone; see to read various documents related to assigned activities; lift, move, re-position, and connect light to moderately heavy network and workstation equipment components; physical, mental and emotional stamina to endure long hours under sometimes stressful conditions.

#### SAMPLE HAZARDS:

Occasional contact with dissatisfied or abusive individuals; exposure to dust when equipment is installed or moved.