GOLDEN GATE BRIDGE
HIGHWAY & TRANSPORTATION DISTRICT

JOB TITLE:	SENIOR NETWORK ADMINISTRATOR	DIVISION:	DISTRICT – INFORMATION SYSTEMS
REPORTS TO:	SENIOR INFORMATION SYSTEMS MANAGER	EEO CATEGORY:	03-TECHNICIAN
FLSA:	NON-EXEMPT	SAFETY-SENSITIVE:	NO
CLASSIFICATION:	REPRESENTED	LOCATION:	SAN FRANCISCO

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

Position Summary

Under general supervision of the Information Systems Manager, this position is responsible for optimal and secure operation of the District's data communications network. The District's data communication network includes at least 3 core switches, 36 departmental switches, 9 routers, 20 wireless access points, firewalls, and cabling in 30 buildings. New projects will add to these totals. The Senior Network Administrator must be able to identify needs, design upgrades and implementation of new technology as needed to support the various responsibilities of this position. Responsibilities include installation, configuration, monitoring and maintenance of wireless environment, switches, routers, firewalls, NAC, extranet connections and other LAN and WAN communications and equipment. This position uses District maintenance contracts for maintaining network equipment and is responsible for ensuring contracts are up to date.   The Senior Network Administrator works closely with vendor and manufacturer staff to coordinate installation and maintenance projects and to determine and correct problems that may occur during start-up and operation. Consults with vendors and manufacturers regarding product compatibility and purchases, investigates user complaints of malfunctioning equipment; isolates the fault and makes repairs where appropriate, initiates trouble calls if equipment is under maintenance contract and/or purchases repair service as necessary. Position functions as Level II support and will be responsible for supporting the help desk resolve end-user problems.   Position may also provide occasional Level I Helpdesk support as dictated by staffing schedules. District's switch network is a mixed Cisco and HP environment moving to a pure Cisco POE switch environment. Router network is 100% Cisco. WAN environment is moving to an MPLS network. Upgrades to network typically require off-shift work to avoid user disruption.

Essential Responsibilities

- Installation, configuration, monitoring and problem resolution of Network switching equipment and routing equipment
- Monitors the District's WAN Connections
- Conducts analog, digital and protocol tests of data communications channels and reconfigures and adjusts as necessary
- Installs and terminates Cabling as needed
- Maintains database of location, type, configuration, and communication linkage of all nodes on the District network. Must know the location, type, and communication linkages of all nodes when asked
- Works closely with users to determine needs and define problems; instructs users in the use of network and other data communications systems
- Maintains a current knowledge of changes in the data communications field; suggests improvements to District network and related hardware and software applications to utilize available technology and meet current user needs
- Regular and reliable attendance and performance are required

Required Knowledge, Skills and Abilities

Working knowledge of:

- Ongoing identification of needs, design upgrades and implementation of new technology
- Hardware, software and networking protocols utilized in LAN, WAN and related data communication systems, including fiber optics and peripheral equipment
- LAN switch and router management via telnet and web interfaces
- Router protocols and setup
- TCP/IP communication
- VLAN technology
- Cisco IOS software
- Firewalls and VPN servers
- Syslogs and syslog servers
- The use and care of tools and equipment related to the installation, troubleshooting, maintenance and upgrading of a variety of voice/data networks and communication hardware and software
- Record keeping practices and procedures
- New and existing software, applications, databases and hardware through formal, informal and on the job training and self-study

Ability to:

- Prioritize competing requests for service, multiple tasks, and organize schedules to meet District requirements
- Explain technical information to non-technical users
- Prepare clear, concise reports, documentation and correspondence
- Communicate professionally and effectively, both orally and in writing
- Work professionally and productively with all encountered in the course of work, including personnel in governmental agencies, local authorities, consultants, the general public, and District staff

Minimum Qualifications

Education and/or Experience:

- Three years position related experience; installation and repair with LAN and WAN equipment and wiring
- One year experience performing hands-on, independent work with networks
- Two years of college or technical school training (60 semester units or 90 quarter units) in information systems, networking, network technologies or a related field; and "hands-on" experience with personal computer applications. (Technical experience in hardware, software, and network installation and maintenance may be substituted in lieu of education on a year for year basis.)
- Experience with LAN and WAN equipment which should include routers, switches, cabling, and troubleshooting of physical layer. (Cisco CCNA or CCNP certification is a plus.)
- Desired knowledge and/or experience on the following areas: *Hewlett Packard Network Switches; Microsoft Operating Systems up to and including Windows 2003 Server and Windows XP Pro; Linux; NTOP software; Cisco MARS; Netflow; and Fluke OptiViewII or III.*

Required License:

- Must possess and maintain a current, valid California Driver's License and satisfactory driving record.

Physical Requirement:

Mobility to work in a typical office and computer room setting. Mobility and dexterity to install cables and other computer and network hardware. Strength to lift and move components weighing up to 50 pounds. Vision to read printed materials and a computer screen. Color vision to distinguish between differing wiring and cabling components. Hearing and speech to communicate in person and over the telephone. Must be willing to work extended hours and must be available to be called back in emergency situations. Must be willing to be on-call (for emergencies only) on a rotating basis.