VALLECITOS WATER DISTRICT

SYSTEMS ADMINISTRATOR

DEFINITION

Under general supervision, maintains District’s computer network systems and infrastructure, including security and resource inventory, monitoring, reporting, and troubleshooting; may oversee the work of consultants and vendors and coordinates hardware and software development, enhancement, procurement, and installation; and performs related duties as assigned.

CLASS CHARACTERISTICS

This single incumbent, non-supervisory position has primary responsibility for a wide range of duties in maintaining computer network systems and providing technical support for personal computer users. It is distinguished from the Information Technology Supervisor, which oversees all functions of the department.

ESSENTIAL FUNCTIONS

Essential functions include, but are not limited to, the following:

- Performs systems administration for the District’s computer information systems, for all District facilities and departments; administers system-level security procedures and protocols; establishes and maintains user and other authorization files; installs, upgrades, customizes, tests, maintains, and supports operating system and subsystem software; configures and integrates operating software, application software, hardware, and devices across platforms; monitors system performance; troubleshoots system-related problems and installs program fixes; creates shell programs and utility scripts; monitors, backup, and recovery processes;
- Coordinates network administration functions applicable to the District’s LAN/WAN, including the installation, upgrade, configuration, integration, and troubleshooting of network infrastructure, ensuring continued functionality;
- Evaluates and recommends the selection and purchase of hardware and software; recommends voice and data network configuration changes or upgrades based on usage, repair history, useful life of equipment, and department input; assists with hardware and software procurement; maintains records of software licensing agreements;
- Participates in developing long-term plans, goals, and objectives to achieve District and department technology and business priorities; provides input for the annual budget; develops and recommends plans, goals, policies, systems, and procedures applicable to areas of assigned responsibilities;
- Participates in the maintenance of all services and activities of the information systems section including GIS, PC network, data processing, hardware, software, and communications support and maintenance; supports maintenance of electronic document management system;
Provides technical support in preparation for, and during, District Board meetings; answers questions from Board members; may be required to stay after regular working hours; monitors and responds to the Information Systems help desk inquiries; installs a variety of computer related equipment and software; schedules and completes changes to employee work stations, as related to information technology;

- Monitors and maintains data replication process to disaster recovery (DR) site; works closely with District's Emergency Operations Center (EOC);
- Performs project management for essential information systems projects; meets with end users and project team members to define technology needs; provides technical guidance and direction; performs applications installation, testing, and maintenance of program enhancements and software packages;
- Administers and maintains the District's central network user account security, telephone/voicemail, and employee alarm/access-control information; maintains security cameras, access control, alarm systems, and wireless network using air fiber technology; monitors and maintains wireless corporate and guest networks and Virtual Private Network (VPN) security access; performs basic systems maintenance such as adding and deleting users, changing user passwords, and running and restoring back-up files;
- Attends and participates in professional group meetings; monitors trends and developments in computing, networking, and multi-platform communication technologies; evaluates new operating systems, network software, hardware, methods, and techniques to improve systems/network reliability and performance;
- Operates copiers and a variety of office equipment;
- Performs duties in a professional manner and works well with others or in a team setting;
- Establish and maintain cooperative working relationships with co-workers, outside agencies, and the public;
- Regular attendance and adherence to prescribed work schedule to conduct job responsibilities;
- Observes safe work practices and safety methods; performs other duties as assigned.

QUALIFICATIONS GUIDELINES

Knowledge, Skills, and Abilities

Knowledge of:
- Principles, methods, and techniques in the design and operation of information systems for computers, networks, and platforms equivalent to those used by the District;
- Systems and application programming;
- Computer systems and network administration, maintenance, support, and troubleshooting;
- SCADA document storage and archiving software, Microsoft products;
- Network architectures (mesh, hybrid, ring, point to point), theory, and principles of design, integration, and administration, including topologies and protocols;
- Principles and practices of systems analysis and design;
- Computer programming principles, techniques, and procedures for business and technical system applications;
- Standard programming languages and utilities like those used by the District;
- Project planning, prioritizing, and scheduling techniques.

Ability to:
• Assist in planning and organizing a comprehensive District-wide information systems program to meet District business and operating objectives, including developing long-range technology goals;
• Analyze complex operational and administrative problems, evaluate alternatives, and recommend or implement effective courses of action;
• Analyze, troubleshoot, and resolve highly technical networking issues;
• Work outside of regular working hours for emergencies, as well as projects with advanced notice;
• Develop and maintain effective processes with District end users;
• Manage the operations of virtual machine server platform and inter-operating LAN/WAN infrastructure to achieve optimal technical performance and user support;
• Understand, analyze, and define user requirements and recommend cost effective systems solutions;
• Meet deadlines and prioritize tasks with and without direction;
• Communicate effectively, both orally and in writing;
• Establish and maintain effective relationships with those contacted in the course of the work.

Education & Experience

Any combination of education or experience that would likely provide the necessary knowledge and abilities is qualifying. A typical way to obtain these knowledge and abilities would be: Bachelor’s degree in Information Systems, Computer Engineering, or a closely related field, and; three years of experience in computer systems administration and support. Related certifications may be considered in lieu of the degree.

Licenses, Certificates, and Special Requirements

• Microsoft Certified Systems Administrator, Cisco Certified Network Association/Professional (CCNA/CCNP) or Certified Information System Security Professional (CISSP) are desirable.

PHYSICAL DEMANDS AND WORK ENVIRONMENT

The physical demands and work environment described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Employees may be required to wear and/or use personal protective and other safety equipment. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to stand; walk; sit; use hands and fingers to grasp and feel; reach with hands and arms; and talk or hear. The employee frequently stoops, kneels, or crouches. The employee must occasionally lift and/or move up to 60 pounds. Specific vision abilities required by this job include close, distance, color, and peripheral vision; depth perception; and the ability to adjust focus.

Environment: Office environment. Frequently works in or around areas with minor amounts of dust. Some work done on ladders up to 4 feet above ground. Noise level is usually quiet.
I have reviewed this Job Description with my Supervisor and agree with its contents.

______________________________________________________________________
Employee Signature                                                                 Date

______________________________________________________________________
Supervisor Signature                                                               Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.