

JOB DESCRIPTION

Job Title	SCADA Systems Specialist	Supervisor	Information Systems Manager
Department	Finance & Administration	Class Group	General Unit
Division	Information Systems	Salary Grade	76
Section	N/A	FLSA Status	Non-Exempt

This job description is intended to describe the general nature and level of work being performed by people assigned to this job. The description is not intended to be an exhaustive list of responsibilities, duties and skills required for this position.

BASIC JOB SUMMARY

Under direction of the Information Systems Manager, a SCADA Systems Specialist provides support, implementation and maintenance of the District’s process control and data acquisition control systems. A SCADA Systems Specialist provides ongoing end-user training and support; designs, programs, installs and maintains application; designs district networks to support various applications and maintain reliable communications; installs and maintains server software; manages projects; acts as liaison between District staff and consultants; acts as systems administrator for various SCADA systems; develops capital and operating budget for SCADA equipment; and performs related duties as required.

ESSENTIAL DUTIES

Duty 1

Meets with operations staff to analyze and document SCADA system needs; reviews new applications, programs, and their impact on operations; designs, develops, and modifies programs; implements new functionality of SCADA Systems. Establishes long-term needs for SCADA systems, and plans strategy for developing systems.

Duty 2

Implements, maintains, and supports systems related to SCADA applications; researches bugs and issues reported by users; determines best method for issue resolution. Installs new releases and program fixes for SCADA system applications and hardware; provides database administration and maintenance; maintains security of SCADA systems, databases, and applications.

Duty 3

Troubleshoots, and repairs/replaces programmable logic controllers (PLC's); PLC network communications equipment. Evaluates SCADA system communications performance and monitors SCADA system data collection reports; acts as SCADA systems administrator.

Duty 4

Acts as liaison between District staff and SCADA consultants regarding any component of the system; maintains contracts for continuing support/maintenance for hardware and software.

Duty 5

Provides network design, security, and troubleshooting of local area network related problems. Ensures that available hardware meets requirements of software specifications; determines needs, researches hardware sources and purchases upgrades of equipment; troubleshoots and repairs/replaces malfunctioning hardware and network communications equipment.

Duty 6

Trains operations staff in SCADA applications and SQL data reporting; creates custom reports per needs of users; provides technical assistance to users. Advises in troubleshooting of instrumentation related problems.

Duty 7

Insures adherence and compliance with safety and health policies and procedures as well as state and federal laws and regulations; trains employees and monitors safety practices; periodically evaluates worksites to insure safe conditions; attends all required safety trainings/meetings.

Duty 8

Performs work in a safe manner at all times; complies with safety and health policies, procedures and practices; attends and completes all mandatory safety training courses and events; and works to insure the safety of co-workers and the general public.

QUALIFICATIONS

DEMONSTRATED KNOWLEDGE OF AND PERFORMANCE IN THE FOLLOWING AREAS:

- ◀ Windows Operating Systems, and SQL Server;
- ◀ TCP/IP, LAN, WAN, Frame Relay, Wireless, and Remote Access;
- ◀ Switches, Routers, Firewalls, Gateways, Bridges, and Hubs;
- ◀ Spread Spectrum Radios, ADN modems, and Dialup modems;
- ◀ Fiber optic communication systems;
- ◀ Field instrumentation and signal processing;
- ◀ Systems design theory and methods;
- ◀ Programming theory, database design and structure;
- ◀ Mechanical, electrical and control systems;
- ◀ Wonderware and Modicon PLC Software;
- ◀ Personal computer office applications and programming applications.

ABILITY TO:

- ◀ Analyze and define complex problems, evaluate alternatives, and provide solutions.
- ◀ Communicate both orally and in writing at the level appropriate for the audience;
- ◀ Read, interpret and apply complex technical publications, manuals, electrical drawings, and other documents in performance of assigned tasks;
- ◀ Adapt and apply new technologies;
- ◀ Prepare clear and concise technical reports and correspondence;
- ◀ Plan, organize, and schedules work to meet deadlines;
- ◀ Review, check, and inspect the work of contractors and consultants
- ◀ Develop budgets and perform project oversight;
- ◀ Establish and maintain effective working relationships with employees, consultants, and vendors.

PHYSICAL AND SENSORY REQUIREMENTS:

- ◀ Sufficient eyesight to read fine statistical reports and standard text and data on computer terminal screens;
- ◀ Ability to speak and hear at normal conversational levels in person and over the telephone;
- ◀ Manual dexterity to write legibly and to use calculators, computer terminal, and other general office machines;
- ◀ Ability to lift and carry up to approximately twenty-five pounds; and to reach, bend, or crouch to use files and records.

TRAINING AND EXPERIENCE GUIDELINES:

Any combination of training and experience, which demonstrates attainment of the required knowledge and ability to perform the required work (with reasonable accommodation, if needed), typically:

EDUCATION: High school diploma or equivalent. The equivalent of two years of technical training in electrical control systems or computer hardware/software maintenance is required. Equivalent to a bachelor's degree in computer science or closely related field with significant coursework in computers, systems and programming is desired.

EXPERIENCE: Four (4) years of recent experience designing, programming, and maintaining SCADA systems.

REQUIRED CERTIFICATIONS, LICENSES, AND REGISTRATIONS:

A valid California class C driver's license must be maintained at all times.

DESIRED CERTIFICATIONS, LICENSES, AND REGISTRATIONS:

A Grade IV Electrical/Instrumentation Technologist issued by the California Water Environment Association (CWEA).