

## ROCKLIN UNIFIED SCHOOL DISTRICT Job Description



**JOB TITLE:** Database Specialist

**SUMMARY:**

The Database Specialist is a senior level analyst position requiring specialized education and training in the field of study typically resulting in a degree. Advancement to this position would require competency in the design and administration of relational databases designated for business, enterprise, and student information. Defines, develops, analyzes and modifies complex databases and associated master files that support software applications. Performs the technical design and development of computer database systems, associated master files, and applications, particularly those associated with student information. Coordinates with systems administration to establish relational databases and ensure quality and performance. Plans, establishes, and maintains allocation controls over the availability of disk space for current and future database needs.

**SUPERVISOR:** Network Administrator, Management Information Systems Department

**EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES:**

*(The following information is descriptive and is not restrictive as to duties required)*

1. Designs, develops and tests computer applications and systems related to database administration.
2. Administers SQL servers, MS Access databases, and Windows and Linux operating systems.
3. Consults with a variety of District personnel to determine computer database needs and requirements and coordinates database administration related activities and services. Assists with user implementation of database and data processing systems.
4. Coordinates multidisciplinary teams for conversion of applications to integrated relational database formats. Participates in developing data models and standards, determining the data base fields of information, development of programs, troubleshooting of data input and output, and training of Technology Services staff and departmental users.
5. Defines database items, structures and relationships, including redundancy. Develops and maintains data dictionaries. Monitors and tunes database performance such as record storage accuracy and efficiency. Monitors and adjust file system capacities.
6. Periodically upgrades and tunes operating systems governing databases to achieve optimum performance. Develops techniques for migrating information from and to centralized databases.
7. Analyzes problems with database applications through consultation with users. Diagnoses

networking, hardware, and software issues and problems contacting applications and hardware vendors as necessary.

8. Develops program designs for database administration from conception and design to implementation phase.
9. Analyzes, modifies, tests and debugs existing database structure, systems, and programs. Analyzes problems and makes modifications to systems and individual programs.
10. Develops modifications or enhancements to existing database structures and programs to meet user needs or system design changes. Assists in developing and modifying internal data processing standards and procedures.
11. Ensures security and integrity of database structures and content. Administers access security to database tables including adding/deleting users, controlling database login passwords, and authorization access to tables.
12. Assists other members of the department with database related problems. Analyzes cause of problems, designs, and solutions.
13. Prepares documentation/descriptions of how users access data. Documents physical database descriptions such as location, space requirements, and access method to protect data resource against unauthorized access and accidental destruction.
14. Provides full range of reports generated or supported by systems.
15. Performs other duties as assigned that support the overall objective of the position.

### **EMPLOYMENT STANDARDS:**

#### **Knowledge of:**

1. Principles and procedures of computer systems, including relational database analysis and design.
2. Specific relational database programs used by the District.
3. Host computer database management system concepts, methodologies, analysis and design.
4. Database design techniques and host computer logical and physical database structures and relationships, including those for networked microcomputer systems.
5. Database planning, program development standards, procedures, tools and documentation requirements.
6. Standard query language (SQL) extensions to access relational databases as well as database definition and manipulation languages.
7. Multiple operating systems such as Windows and Linux.
8. Industry standard software for tracking and report generation.
9. Language and writing skills to read, understand, and prepare system documentation and instructions.
10. Math skills to record sums, fractions, and statistical data.

11. Communication skills in order to convey technical concepts and consult with a wide range of internal contacts for purposes of education, conversion of data and problem solving.
12. Microsoft Windows environment including Active Directory.

**Ability to:**

1. Perform a full range of database systems analysis and related programming duties.
2. Requires the ability to install, configure, and troubleshoot database and application software.
3. Must be able to analyze and evaluate the needs of users and develop the most effective program or solution to meet those needs.
4. Operate the computers, operating systems, peripherals, and other equipment used by the District for information retrieval, storage, analysis, and processing.
5. Write basic SQL extensions to access a relational database and library and lexical functions.
6. Design host computer logical and physical database structure and relationships, including those for microcomputer and network systems.
7. Work independently and collaboratively, following logical progressions of program systems and to think logically, creatively, and in abstract terms.
8. Analyze and solve technical problems under extreme time pressure.
9. Read, interpret, and apply complex technical information.
10. Learn and apply emerging languages and applications within a reasonable time.

**EDUCATION:**

Qualified candidate will have an Associates degree or equivalent experience. Technical education or certifications in the areas of database administration, analysis and development is preferred. This person must be a technology specialist in the area of high-availability, fault-tolerant, relational database environments.

**EXPERIENCE:**

This position requires a minimum of two years experience in the profession of computer sciences and/or in the design and management of relational databases.

**TYPICAL PHYSICAL REQUIREMENTS**

Sits for extended periods; frequently stands and walks; stoops and crouches to pick up and move objects; ability to lift 50 pounds or carry object weighing over 25 pounds; normal manual dexterity and eye-hand coordination; corrected hearing and vision to normal range; verbal communications; use of office equipment including computers, telephones, calculators, copiers, and FAX.

**TYPICAL WORKING CONDITIONS**

Work is normally performed in a computer laboratory environment; continuous contact with staff, parents, and students. The work environment characteristics described here are

representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee frequently works in indoor environmental conditions. The employee is moderately exposed to video display, moving mechanical parts, and outdoor weather conditions. The employee occasionally uses personal vehicle for work-related travel. The noise level in the work environment is usually moderate.

**CERTIFICATES, LICENSE, REGISTRATIONS:**

Valid California Driver's License

Adopted: 8/02/06

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**No person shall be denied employment solely because of any impairment which is unrelated to the ability to engage in activities involved in the position(s) or program for which application has been made. It is the responsibility of the applicant to notify the employer of any necessary modifications to the job or work site in order to determine whether the employer can reasonably accommodate any known disability.**

**The Rocklin Unified School District  
Maintains a tobacco-free, drug-free environment**