



**APPROVED BY: THE CHIEF
ADMINISTRATIVE OFFICER**

EFFECTIVE: January 2009

DATABASE ANALYST

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.

DEFINITION

To provide highly technical support in designing, developing, documenting and maintaining District database systems; to create database structures that consolidate the conceptual, logical and physical models of data stored by the District; to participate in work to improve the quality, accuracy and integrity of information and shared data resources; and to perform other duties as assigned.

DISTINGUISHING CHARACTERISTICS

Positions in this class are distinguishing by working full-time on maintaining and improving the District's database administration in support of information systems business and other applications. This class is distinguished from the higher class of Database Administrator in that the latter is the expert on and is responsible for all District-wide database systems and administration, and provides technical and functional supervision to employees in this class of Database Analyst.

SUPERVISION RECEIVED AND EXERCISED

Works under direction.

TYPICAL TASKS

Typical responsibilities and duties may include, but are not limited to, the following:

1. Perform highly technical duties in support of the District's database systems; design, develop, document and maintain the District's database systems; design and maintain data stores and libraries.
2. Perform database administration duties; provide support to programming staff in planning, designing and implementing application databases; maintain database security

and user access; design, create and maintain physical objects including tables, files, libraries and indexes to support computer applications using database management systems; monitor database performance and troubleshoot problems; monitor and maintain space allocation for databases and files.

3. Install and maintain software for standard database management systems; establish procedures for database operation, control and recovery.
4. Install, configure, monitor, maintain and tune application server software for web-based enterprise applications.
5. Install and maintain standard development software and case tools (e.g., Oracle Designer, Oracle Internet Development Suite) for use by application design/programmer staff
6. Monitor database performance and fine tune for high availability; respond to system problems that may affect the database.
7. Create and implement database fields that have standard names and formats, database records that have standard names, formats and access strategies and database files that relate with other database files; implement operational policies to support shared data item access and modification rights.
8. Participate in the development and implementation of policies and procedures related to database availability, security; recovery and related services.
9. Maintain infrastructure for business applications programming, applications servers and databases.
10. Work with vendors' technical support staff on the implementation and maintenance of custom systems (e.g., payroll and human resource).
11. Manage security for application servers, Web servers, and database servers by using authentication, authorization and encryption.
12. Attend and participate in professional group meetings; stay abreast of new trends and innovations in the field of data network operations.
13. May recommend standards and preferred methodologies for use of the District's database management system environment and associated application developments.
14. Perform related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

Operational characteristics of a variety of database systems.
Principles and practices of database design and administration.

Database management systems, tools and utilities.
Concepts and principles of database technology.
A variety of programming languages.
Methods and techniques of maintaining database security.
Methods and techniques of evaluating database models.
Methods and techniques of developing technical documentation for database systems.
Principles and practices of database administration.
Principles of application servers.
Pertinent federal, state and local laws, codes and regulations.

Ability to:

Develop and modify database models based on District needs.
Evaluate District database needs and tools and apply technical principles and concepts to develop business solutions.
Identify applications functionality through systems analysis.
Perform various database administration functions.
Develop standards and methodologies for use of the District's database.
Troubleshoot and resolve operational problems.
Prepare clear and concise technical reports and documentation.
Analyze problems, identify alternative solutions, project consequences of proposed actions and implement recommendations in support of goals.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training Guidelines

The following combination of experience and training are the minimum required for this classification:

Experience

Two years of increasingly responsible database administration experience.

Training

Equivalent to a Bachelors degree from an accredited college or university with major course work in computer science, information systems or a related field. Directly related experience may be substituted for the college requirement on the basis of one and one-half years of experience for one year of education to a maximum of four years.

License or Certificate

Possession of a current valid California class C drivers license.

WORKING CONDITIONS

Environmental Conditions

Office environment; may travel from site to site; some positions require field visits; work closely with others and alone; may work irregular hours.

Physical Conditions

Essential functions may require maintaining physical condition necessary for: sitting for prolonged periods of time; extensive use of computer keyboard and pointing device(s); light or moderate lifting; visual acuity for reading computer screens, documents, data and correspondence; using telephones; intermittently twist, stretch and grasp to reach materials or equipment; operating office equipment.

CLASS LEGEND

Established Date: 10/03
Revision Dates: None
Employee Group: EA

	<u>Current</u>	<u>Previous</u>
Class Code:	XK5	
Series Code:	1XK	
Family Code:	A16	
Previous Titles:	None	
Analyst:	PT	