

**DATABASE ADMINISTRATOR 2****Nature of Work**

Under limited supervision, at the full-performance level, installs and configures database management system software, installs software upgrades, defines and establishes database standards and monitors a database environment. Oversees all database operations for a large state agency or department or maintains more complex applications. Recommends and coordinates training for departmental DBA's. May assist in selecting and maintaining the appropriate hardware and operating system environment for the size and usage of the data base management system. Performs as a resource to persons serving as application level database administrators. May perform as an applications database administrator as well as systems database administrator. Performs several duties that are system programmer in nature. May supervise a staff of application level database administrators. An irregular work schedule may be required of this position. Performs related work as required.

**Distinguishing Characteristics**

This is a highly responsible administrative and technical position with work in managing and supervising database creation and maintenance activities. Database Administrator 2 controls authority of departmental DBA's taking into account their potential to impact other systems. Database Administrator 2 recommends hardware and software needed. Analyzes the database intended usage and develops the appropriate configuration parameters for installing and starting up the database management system. Trains and develops skills of lower level database administrators. May delegate work to lower level database administrators in a large agency or on large projects. Monitors database performance and makes necessary configuration changes, or recommends hardware and software upgrades. This level is intended for database administrators who work in information system divisions that install and maintain database management systems in mainframe, mini, or client/server environments.

**Examples of Work**

Assists in recommending and establishing the hardware and operating system environment that will support the database management system.

Installs and configures database management system software. Plans for and implements distributed databases in large agencies that may be from different vendors and running under different operating systems; considers local and

**DATABASE ADMINISTRATOR 2 (CONT'D)****Examples of Work (cont'd)**

remote access, naming conventions, application systems phased commits and rollback strategies, and many other aspects of distributed database environments.

Develops and implements the database management system security strategy.

Creates and monitors an appropriate development and test environment.

Creates and monitors an appropriate production environment.

Develops and implements a complete database backup and recovery system.

Grants the appropriate access and authorities to the lower level database administrators based on specific delegations of tasks.

Develops an education plan for all levels of database users.

Assists in developing standards for application development use of the database.

Coordinates and monitors the usage of database storage media for all aspects.

Develops guidelines for object naming conventions, writing and executing SQL statements (DML).

Develops procedures for database creation and modification (DDL).

Defines procedures for implementing test and production application modifications.

Evaluates and recommends tools for database administrators and application developers; may install tools.

Meets with agency personnel to determine database functions, goals and areas for database enhancement.

Participates in self-study and vendor supplied training to develop and improve skills.

**Knowledge, Skills, and Abilities**

Knowledge of database management, database structure and internal security concepts.

Knowledge of the computer resources available, the capabilities of the database management systems software and hardware configurations and software packages.

Knowledge of information processing concepts and equipment usage.

Knowledge of SQL, DDL and DML (Data Definition Language and Data Manipulation Language).

Knowledge of project control techniques.

## DATABASE ADMINISTRATOR 2 (CONT'D)

**Knowledge, Skills, and Abilities (cont'd)**

Skill in preparing documents used in Standards, procedures, guidelines, documentation and communicating with various personnel.

Ability to load and reorganize database data.

Ability to evaluate and analyze user requests and develop effective plans for database development and maintenance to meet user requirements.

Ability to present ideas in a clear, concise format using narrative statements and logic diagrams.

Ability to maintain effective working relationships with information processing personnel and users.

Ability to understand complex technical manuals.

**Minimum Qualifications**

**Training:** Successful completion of an Associate Degree in computer science or related field from an accredited college, university or business school.

**Substitution:** Two years of experience as a Database Administrator for Universal DB2, ORACLE, INFORMIX, SQL Server, SYBASE or any other multi-user database management system on mainframe, mini, or client/server platforms may substitute for the required training.

**Experience:** Four years of full-time or equivalent part-time paid experience in database administration and management work, with Universal DB2, ORACLE, INFORMIX, SQL Server, SYBASE or any other multi-user database management on mainframe, mini, or client/server platforms OR eight years of full-time or equivalent part-time paid experience in programming and analysis work using any of a variety of programming languages, including at least four years of SQL experience and a variety of data storage techniques.

**Substitution:** Bachelor's degree from an accredited college or university in computer science or related field may be substituted for the training and two years of the experience.

Established: 3/21/96  
Revised: 11/15/01  
Effective: 1/1/02