GENERAL DESCRIPTION

Performs highly complex (senior-level) database administration work. Work involves planning, developing, maintaining, and monitoring integrated database systems; evaluating and reviewing database policies and procedures; and maintaining data integrity. May supervise the work of others. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

Coordinates and/or conducts the analysis, design, modification, and maintenance of database structures.

Designs and implements procedures necessary to save, retrieve, and recover databases from hardware and software failures.

Evaluates and recommends goals and objectives for the use and improvement of an efficient and cost-effective database system.

Provides input into the development and revision of policies and procedures to guide in the use and acquisition of database software and resources designed to ensure the integrity of the database environment.

Establishes and implements database security standards and controls, and user access levels.

Evaluates and recommends database software packages for potential acquisition.

Performs and reviews logical and physical data modeling, designs relational database models, and creates physical data models from logical data models.

Performs database performance monitoring and implements efficiency improvements.

Modifies existing databases and database management systems.

Plans and supports the installation of database software and migrations to new data management system software levels; and verifies and tests the migrations to ensure data reliability and functionality.

Assists in developing budgets for database management systems.
Assists in developing standards, guidelines, policies, and procedures designed to ensure the integrity of the database environment.

May supervise the work of others.

Performs related work as assigned.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in computer systems, data analysis, or database development and maintenance work. Graduation from an accredited four-year college or university with major coursework in computer science, management information systems, or a related field is generally preferred. Education and experience may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of the principles, practices, and techniques of computer databases, programming, and systems design; of computer operations, systems, and procedures; of project control and cost estimating techniques; of computer database application systems; of computer programming languages; of data processing flowcharting techniques; of database structures and theories; of current database technologies; and of data analysis, evaluation, and testing techniques and protocols.

Skill in complex problem solving and critical thinking, and in the use of a computer and applicable software.

Ability to identify and define user task needs, to process information logically, to conduct short-range and long-range project planning studies, to communicate effectively, and to supervise the work of others.