GENERAL DESCRIPTION

Performs complex (journey-level) database administration work. Work involves developing, maintaining, and monitoring integrated database systems. May provide guidance to others. Works under general supervision, with moderate latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

Supports the installation of database software and migrations to new data management system software levels, and tests the migrations to ensure data reliability and functionality.

Analyzes, designs, modifies, and maintains database structures.

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

Establishes and implements database security controls and user access levels.

Evaluates and recommends database software packages for potential acquisition.

Prepares and develops database documentation, procedures, and definitions for data dictionaries.

Performs 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.

Assists in modifying existing databases and database management systems.

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

May provide guidance to 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.

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

Ability to identify and define user functional and technical database needs, to conduct short-range and long-range project planning studies, to develop reports, and to communicate effectively, and to provide guidance to others.