

# **Database Administrator**

CLASS TITLE	<b>CLASS CODE</b>	SALARY GROUP	SALARY RANGE
DATABASE ADMINISTRATOR I	0211	B21	\$51,278 - \$82,901
DATABASE ADMINISTRATOR II	0212	B23	\$58,184 - \$94,913
DATABASE ADMINISTRATOR III	0213	B25	\$66,259 - \$108,666
DATABASE ADMINISTRATOR IV	0214	B27	\$80,174 - \$135,594
DATABASE ADMINISTRATOR V	0215	B29	\$97,010 - \$164,069

### **GENERAL DESCRIPTION**

Performs database administration work involving developing, maintaining, and monitoring integrated database systems; implementing database procedures; and maintaining data integrity.

#### DISTINGUISHING CHARACTERISTICS

The Database Administrator job classification series is intended for employees who develop and maintain computer databases. Employees typically perform work that includes designing, configuring, and managing databases to ensure the integrity, security and accessibility of the agency's data. Database administrators make sure that data analysts and other users can easily use databases to find the information they need and that systems perform as they should. In contrast, the Data Analyst job classification series does not focus on managing database structures and flows; rather, employees in that series perform analytics and statistical modeling on existing data sets to identify patterns and trends.

#### **EXAMPLES OF WORK PERFORMED**

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

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

Maintains data standards.

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.

Creates test database environments, including necessary libraries and procedures.

Performs related work as assigned.

#### **DESCRIPTION OF LEVELS**

Examples of work and descriptions are meant to progress through the levels. For example, an employee at level V may also perform work listed within the previous levels.

**Note**: Factors that may distinguish between journey levels include the degree of independence in performing the work and the complexity of the work and may include the employee's years of related experience, education, and certifications. Employees at the journey levels may independently perform the full range of work listed in the examples or may assist others in that work.

**DATABASE ADMINISTRATOR I:** Performs routine to moderately complex (journey-level) database administration work. Works under general supervision, with limited latitude for the use of initiative and independent judgment. Employees at this level may rely on direction from others to solve problems that are not standard. Employees may also assist other staff in performing work of greater complexity.

**DATABASE ADMINISTRATOR II:** Performs complex (journey-level) database administration work. Works under general supervision, with moderate latitude for the use of initiative and independent judgment. Employees at this level may work more independently than those at the previous levels and may routinely assist other staff in performing work of greater complexity. Employees may:

- Analyze, design, modify, and maintain database structures.
- Establish and implement database security controls and user access levels.
- Perform database performance monitoring and implement efficiency improvements.

**Note**: A senior-level employee (levels III-V) may serve in a lead or supervisory role; however, supervisory responsibilities within this job classification series will be normally found at levels IV and V.

A senior-level employee may perform the full range of work identified in the preceding levels and/or may coordinate, evaluate, or oversee that work for others. Factors that may distinguish between senior levels include the scope of responsibility and oversight, the size and complexity of database administration duties, and the employee's related experience, education, and certifications.

**DATABASE ADMINISTRATOR III:** Performs highly complex (senior-level) database administration work. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may:

- Evaluate and recommend goals and objectives for the use and improvement of an efficient and cost-effective database system.
- Provide 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.

**DATABASE ADMINISTRATOR IV:** Performs advanced (senior-level) database administration work. Works under minimal supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may fully perform highly complex database administration work and may:

- Coordinate and provide application and database operations triage support to troubleshoot and resolve functional and performance issues encountered in production, development, and test environments.
- Design, recommend, and implement procedures necessary to save, retrieve, and recover databases from hardware and software failures.
- Develop standards, guidelines, policies, and procedures designed to ensure the integrity
  of the database environment.

**DATABASE ADMINISTRATOR V:** Performs highly advanced and/or supervisory (senior-level) database administration work. Works under minimal supervision, with extensive latitude for the use of initiative and independent judgment. Employees at this level may be considered technical experts in the field and may:

- Provide direction and guidance in database administration operations and planning.
- Oversee some of the most complex database administration projects, involving managing diverse data sets to ensure integrated database systems.
- Develop goals and objectives for the use and improvement of an efficient and costeffective database system.
- Assess future information requirements.

#### **GENERAL QUALIFICATION GUIDELINES**

#### **EXPERIENCE AND EDUCATION**

Experience and/or education in a field relevant to the work being performed. Agencies have the discretion to identify the general or specialized experience, education, or certifications required for positions and may tailor qualification requirements to be specific and meet the agency's business needs. Agencies also may substitute experience and education for one another, if appropriate and allowed by statute.

## KNOWLEDGE, SKILLS, AND ABILITIES

#### For all levels

- Knowledge of the principles, practices, and techniques of computer databases, programming, and systems design; computer operations, systems, and procedures; project control and cost estimating techniques; computer database application systems; computer programming languages; data processing flowcharting techniques; database structures and theories; current database technologies; and data analysis, evaluation, and testing techniques.
- Skill in complex problem solving and critical thinking, and in the use of a computer and applicable software.

• Ability to identify and define users' functional and technical database needs, to conduct short-range and long-range project planning studies, to develop reports, and to communicate effectively.

#### Additional for Database Administrator III - V levels

• Ability to oversee and/or supervise the work of others.