

Data/Database Administration

Database Administrator

Enters codes to create production data base. Selects and enters codes of utility program to monitor database performance, such as distribution of records and amount of available memory. Directs programmers and analysts to make changes to data base management system. Reviews and corrects programs. Answers user questions. Confers with coworkers to determine impact of data base changes on other systems and staff cost for making changes to data base. Modifies data base programs to increase processing performance, referred to as performance tuning. Workers typically specialize in one or more types of data base management systems. Providing assistance in the planning, development, maintenance, and monitoring of integrated database systems, and ensuring that the conceptual and design phases of new applications are consistent with the structural parameters within the database environment.

Evaluates users' requests for new data elements and systems, incorporates them into the existing shared data environment, and provides technical assistance. Coordinates the use of data to ensure data integrity and control redundancy, loads databases, and reorganizes as needed. Performs data modeling and prototyping. Performs logical and physical data modeling, designs relational database models, and creates physical data models from logical data models. Performs security recovery procedures. Determines and implements database search strategies and storage requirements. Maintains data dictionary ensuring uniformity of definitions and sets standards for use of data dictionary. Monitors database performance and recommends efficiency improvements. Creates test database environment for applications section, including the creation of necessary libraries and procedures.

Executes the procedures necessary to save, retrieve, and recover databases from hardware and software failures within established procedures. Assists with determining, implementing, and enhancing standards on database security and with monitoring agency disaster recovery procedures and systems. Assists with the installation of database software and with analyzing, designing, and implementing databases. Assists in benchmarking and threshold testing of databases and with establishing and controlling necessary database security. Assists in the selection of database management software. Experience in computer systems analysis or computer programming work.

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

Has working knowledge of EIR Accessibility standards and assistive technologies. Ensures that user interfaces for database administration and inputting, viewing, outputting data(via reports) are compliant with accessibility standards. Provides support to users in obtaining data / information when EIR Accessibility issues arise.

- **Level 1:** 1-3 years of experience in the field or in a related area. Has knowledge of commonly used concepts, practices, and procedures within a particular field. Relies on

instructions and pre-established guidelines to perform the functions of the job. Primary job functions do not typically require exercising independent judgment.

- **Level 2:** 4-7 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. A certain degree of creativity and latitude is required. Works under limited supervision with considerable latitude for the use of initiative and independent judgment.
- **Level 3:** 8 or more years of experience, relies on experience and judgment to plan and accomplish goals, independently performs a variety of complicated tasks, a wide degree of creativity and latitude is expected.

Database Architect

Designs and builds relational databases. Develops strategies for data acquisitions, archive recovery, and implementation of a database. Cleans and maintains the database by removing and deleting old data. Must be able to design, develop and manipulate database management systems, data warehouses and multidimensional databases. Requires a depth and breadth of database knowledge that shall help with formal design of relational databases and provides insight into strategic data manipulation. Responsible for making sure an organization's strategic goals are optimized through the use of enterprise data standards. This frequently involves creating and maintaining a centralized registry of metadata.

Has working knowledge of EIR Accessibility standards and assistive technologies. Ensures that all user interfaces for database administration and inputting, viewing, outputting data(via reports) are compliant with accessibility standards

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Data Modeler

Systems Analysts who design computer databases that translate complex business data into usable computer systems. Data Modelers work with data architects to design databases that meet organizational needs using conceptual, logical, and physical data models.

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Data Scientist (Big Data Engineer)

A data scientist (big data engineer) is someone who makes value out of data. Such a person proactively fetches information from various sources and analyzes it for better understanding about how the business performs and builds AI tools that automate certain processes within the company.

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Business Intelligence Analyst

Analysts use data to figure out market and business trends for companies to increase profits and efficiency. They may work directly for a company or as a consultant. They are able to look at large chunks of data and understand trends, and then communicate those trends to the company.

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Data Analyst/Report Writer

Data reporting analysts transform data into information that can be utilized to make business decisions and actions. Their work involves acquiring data from other sources, creating reports on a regular basis, correcting any code issues, and ensuring that databases remain error-free and organized.

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- **Level 2:** 4-7 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. A certain degree of creativity and latitude is required. Works under limited supervision with considerable latitude for the use of initiative and independent judgment.
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Undefined Title: Data/Database Administration

Customer defined title, position, job description, and experience level. This Undefined Position does not have an associated Not to Exceed Rate. Customers must competitively solicit DIR ITSAC Vendors in accordance with threshold requirements and negotiate rates directly with Vendor.