

## **OCCUPATIONAL GROUP: Information Technology**

### **CLASS FAMILY: Database Management**

#### **CLASS FAMILY DESCRIPTION:**

**This family of positions includes those whose purpose is to plan, develop, implement and administer systems for the acquisition, manipulation, storage, and retrieval of data.**

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#### **CLASS TITLE: Database Specialist**

##### **DISTINGUISHING CHARACTERISTICS:**

These positions, at the full-performance level, perform a full range of database management functions, typically serving as an applications database administrator. They analyze application specifications, prepare the physical database structures, create and build all primary objects for the application and make recommendations to application developers in design and implementation. These positions may delegate specific tasks to application programmers to assist in training and development of database administrator skills. Perform related work as required.

**EXAMPLES OF WORK:** *(Any specific position in this class may not include all of the duties listed; nor do the examples listed cover all of the duties which may be assigned.)*

- Monitors systems and platforms to ensure availability; analyzes system, database, application, and backup logs; determines the necessity of any corrective or proactive tasks.
- Performs a variety of maintenance on version control, database objects, business intelligence, 3rd party applications, stored procedures, security, and application infrastructure.
- Provides database support, security, application resolutions, general troubleshooting, and user account administration.
- Coordinate with network and system administrators, system programmers, and technical staff to ensure database availability, connectivity, backup and recovery, infrastructure creation for various environments, and hardware planning and procurement.
- Performs general administrative tasks; prepares time and monitoring reports; attends meetings.
- Conducts system and database patching, upgrades, and migrations.
- May act as lead worker to programmers and support staff.

##### **KNOWLEDGE, SKILLS, AND ABILITIES:**

- Knowledge of database management, database structure and internal security concepts.
- Knowledge of information processing concepts.
- Knowledge of project control techniques.

- Knowledge of SQL, DDL and DML (Data Definition Language and Data Manipulation Language).
- Skill in preparing documents used in guidelines, documentation and communicating with various personnel.
- Ability to load and reorganize database data.
- Ability to evaluate and analyze application specifications and develop specifications for database implementation 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:**

**Education:** Successful completion of an Associate Degree from an accredited college, university or business school.

**Experience:** 1 - 2 years of full-time or equivalent part-time paid experience in database administration.

**Education & Experience Substitution:** Bachelor's degree from a regionally accredited college may substitute for the required education.

**Certificates, Licenses, Registrations:** None

**CLASS TITLE: Database Specialist Senior**

**DISTINGUISHING CHARACTERISTICS:**

These positions are administrative and technical positions responsible for database creation and maintenance activities. They analyze the database intended usage and develop the appropriate configuration parameters for installing and starting the database management system. These positions monitor database performance and make necessary configuration changes or recommend hardware and software upgrades. This level is intended for those who work in information system divisions that install and maintain database management systems in mainframe, mini, or client/server environments. These positions may delegate work to lower level database administrators in a large agency or on large projects. They may supervise, but typically do not have budgetary responsibilities. Perform related work as required.

**EXAMPLES OF WORK:** *(Any specific position in this class may not include all of the duties listed; nor do the examples listed cover all of the duties which may be assigned.)*

- Recommends and establishes the hardware and operating system environment that will support the database management system; installs and configures database management system software.

- Works with Application Developers in modifying, writing, and tuning SQL and application codes.
- Works with Application Project Managers in evaluating the design, needs, and implementation of maintenance on new and existing DB2 Databases.
- Develops and implements the database management system security strategy;
- Creates and monitors an appropriate development and test environment and production environment; implements test and production procedures application modifications.
- Develops and implements a complete database backup and recovery system; prepares for and performs Disaster Recovery protocol for databases.
- Researches and learns new technology and tools to further and enhance skillset and knowledge of DB2; participates in self-study and vendor supplied training to develop and improve skills.
- Works with the System Programmer DBA (SYSADM) in reviewing, evaluating, and implementing new application DB2 DBA software and tools; evaluates and recommends tools for database administrators and application developers; may install tools.
- Trains and develops skills of lower level database administrators; delegates work; develops an education plan for all levels of database users.
- Grants the appropriate access and authorities to the lower level database administrators based on specific delegations of tasks.

#### **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.
- 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:**

**Education:** Successful completion of an Associate Degree from an accredited college, university or business school.

**Experience:** 3 - 4 years of full-time or equivalent part-time paid experience in database administration.

**Education & Experience Substitution:** Bachelor's degree from a regionally accredited college or university may substitute for the required training.  
**Certificates, Licenses, Registrations:** None

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