



Database Administrator - ITO

Occupational Family/Code – Science & Technology: SIT

Profile created: 2005 05

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Occupation Summary	Selection of Competencies	Knowledge	Skills	Personal Attributes
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There are different types of Database Administrators. This competency profile is for Database Administrators in performance roles in the Information Technology Office.

Database Administrators are involved in organizing and managing computer data to ensure integrity and availability. Database Administrators in performance roles ensure that computer server environments are functioning properly and that any development or modifications are consistent with the organization's computer architecture. They plan and install upgrades to database management systems to maximize performance of computer systems; design and modify databases as per user requests and system requirements; monitor system performance; establish and implement backup and recovery processes; establish data security and integrity; and manage disk space.

For some positions, employees may need to be available after hours to perform some of the duties.



Knowledge

Knowledge is the baseline of information acquired through work and life experiences, learning situations and formal education which enables an individual to perform from an informed perspective.

Acts/Regulations/ Legislation

- Knowledge of ministry programs standards, policies and expectations. **(Learn)**
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Theories/Principles

- Knowledge of strategic and project planning techniques. **(Bring – senior/Learn – junior)**

Specifically:

Project management methodology established by the Project Management Institute (PMI) otherwise known as Project Management Body of Knowledge (PMBOK)

Technical

- Knowledge of database concepts, theories and principles. **(Bring)**

Specifically:

- *Responsibilities: backup; disaster recovery; capacity planning; tuning, performance monitoring; physical database structure; RDMS administration roles, instances, profiles, and security connectivity*
- *Database Management Systems: Oracle, Microsoft SQL Server, Sybase SQL Anywhere, IBM DB2, Ingres*
- *Basic database (relational) concepts and objects: tables, columns, rows, stored procedures, referential integrity, normalization, indexing, VI*
- *Sql abilities: definition and construct ddl, definition and construct dml, structure of four basic Sql statements (insert, delete, update, select)*

- Knowledge of networking architecture. **(Learn)**



- Knowledge of operating systems. **(Bring)**

Specifically:

- *HP-Unix*
- *Windows XP*
- *Linux*
- *AIX – Unix/Sun Solaris*

- Knowledge of computer hardware and architecture. **(Bring)**

Specifically:

- *SAN devices*
- *Unix authentication and administration*
- *Active Directory*

- Knowledge of programming concepts, techniques and languages. **(Bring)**

Specifically:

- *Development Platforms: client server; Citrix; n-tier, Web, mainframe*
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Skills

Skills are those demonstrated abilities, or proficiencies, which one has learned from his/her past. These are acquired/developed from past work and life experience, including volunteer work, independent study, life events, community and leisure activities, and formal training.

Skills are demonstrable, measurable and are transferable from one situation to another.

Communication

- Ability to write a variety of detailed, accurate and clear (technical) material such as user systems and requirements documentation and procedures, project plans, letters, requests for proposals, feasibility studies, recommendations and reports, at a level appropriate to the target groups. **(Bring)**

Personal attributes which may link with this skill statement include: logical, thorough, confident, concise...

Leadership

- Ability to conceptualize, develop, monitor, adjust and implement projects, taking into consideration numerous and changing priorities, and or resources to achieve project goals. **(Learn)**

Personal attributes which may link with this skill statement include: logical, adaptable/flexible, thorough, organized, team player...

Problem Solving

- Ability to diagnose technical problems such as delays, malfunctions and errors in order to determine the true cause of the problem and provide a (workable/reasonable/optimal) solution in a reasonable timeframe. **(Bring)**

Personal attributes which may link with this skill statement include: creative, logical, thorough, organized...



- Ability to identify and respond to issues and concerns of others who may be angry or frustrated to reach a mutual understanding. **(Learn)**

Personal attributes which may link with this skill statement include: diplomatic/tactful, assertive, respectful, honest/accountable/responsible/disciplined...

Team/Independence

- Ability to work independently and participate as a team member to meet the needs of clients and co-workers and to build productive, positive work relationships. **(Bring)**

Personal attributes which may link with this skill statement include: adaptable/flexible...

Organizational

- Ability to independently prioritize and organize one's own workload to meet tight deadlines and successfully complete projects in a changing environment. **(Bring)**

Personal attributes which may link with this skill statement include: organized, thorough...

Analytical

- Ability to identify, explore and evaluate options on data, processes and methodologies, information technology and potential systems design to make feasible recommendations. **(Bring)**

Personal attributes which may link with this skill statement include: logical, concise, learning oriented...

Technical

- Ability to design new or adapt existing systems/applications taking into account design alternatives, business requirements, and cost, resource and time constraints. **(Bring)**

Personal attributes which may link with this skill statement include: creative, logical, organized, thorough, methodical...



Personal Attributes

(Bring)

Personal Attributes identify qualities of character, which a person must have to be an effective and successful performer in the job. They are the underlying characteristics, which are deep and enduring parts of an individual expressed most of the time. They are one's personal style or personal effectiveness, which can be described as feelings, attitudes, habits and traits. Each of these is demonstrated through one's behaviour.

The personal attributes are stated under the skill competencies for which they may be most critical.

Personal attributes for Database Administrators include:

To Be...

- Honest/accountable/
Responsible/disciplined
- Logical
- Organized
- Methodical
- Learning oriented
- Adaptable/flexible
- Thorough
- Assertive
- Creative
- Concise
- Respectful
- Confident
- Team player
- Diplomatic/tactful

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