IOB DESCRIPTION

Job Title: Database Administrator

1. STRATEGIC OBJECTIVE:

The Information and Technology Division is responsible for providing support to the Treasury in all areas of operations, facilitating the modernization of fiscal processes through the use of better methods and techniques, and cutting edge information technology. The work of this division improves the acquisition, allocation, utilisation and conservation of public financial resources using automated, integrated, effective, efficient and cost effective information systems.

The Division is responsible for the development and maintenance of the Government's Integrated Financial Management Information System (GIFMIS). It is also responsible for training the AGD's staff as well as staff of the MOFPS and other Ministries, Departments and Agencies (MDAs) in the use and functions of the relevant IT systems, guided by recognized standards and formal policy.

The Division is also responsible for the implementation and maintenance of the AGD's Records Management System (RMS) as part of the overall management system, based on records management principles, to facilitate the management of the AGD's records to meet the AGD's information needs, stakeholders' information expectations, and statutory and fiscal requirements regarding records.

2. **IOB PURPOSE**:

Reporting to the Manager Systems Operations, the Database Administrator is responsible for the performance, integrity and security of the Treasury databases. The incumbent coordinates the planning and development of databases and troubleshooting any applications issues due to database inconsistencies. The incumbent assists with the physical translation and implementation of logical data design specifications. The incumbent also assists in the maintenance of the integrity and security of application systems data and related databases.

Summary of the broad purpose of the position in relation to Government's goals and strategies:

- To perform application development, database administration, and web development services;
- To ensure database integrity and security is maintained and the recovery of application systems within a specified recovery time objective.

3. KEY OUTPUTS

- Relevant technical advice.
- Databases created/maintained.
- Inputs to development of security levels delivered.
- Inputs to Database search strategies delivered.
- Inputs to Database recovery procedures developed.
- Inputs to Appropriate end-user database access control levels documented.
- Physical data storage for database systems optimized.
- Research data collected and analysed.
- Inputs to Testing methodology developed.
- Inputs to standards development submitted.

4. KEY RESPONSIBILITIES

Technical

- Establishes the needs of users and monitors user access and security.
- Monitors performance and manages parameters to provide fast responses to frontend users.
- Maps out the conceptual design for planned databases.
- Considers both back-end organization of data and front-end accessibility for endusers.
- Refines logical designs so that they can be translated into specific data models.
- Further refines physical designs to meet system storage requirements.
- Installs and tests new versions of the DBMS.
- Maintains data standards.
- Writes database documentation, including data standards, procedures and definitions for the data dictionary (metadata).
- Controls access permissions and privileges.
- Develops, manages and tests back-up and recovery plans.
- Ensures that storage and archiving procedures are functioning correctly.
- Conducts capacity planning.
- Collaborates and works closely with Programmer/Webmaster and other IT staff.
- Communicates regularly with technical, applications and operational staff to ensure database integrity and security.
- Participates in research on database technology trends.
- Assists Research and Development efforts in data collection as well as analysis of emerging database technologies.
- Any other related duty that may be assigned from time to time.

5. KEY PERFORMANCE INDICATORS

The job is successfully performed when:

- Data remains consistent across the database.
- Data is clearly defined.
- Users access data concurrently, in a form that suits their needs.
- There is provision for data security and recovery control (all data is retrievable in an emergency).
- Inputs to Databases delivered as required and are to specifications.
- Inputs to Security levels, delivered as determined and to specifications.
- Inputs to Database search strategies delivered as determined and to specifications.
- Inputs to Database recovery procedures developed as determined and to specifications.
- Inputs to appropriate end-user database access control levels documented as determined and to specifications.
- Physical data storage for database systems optimized.
- Research data collected and analysed on a scheduled basis.
- Inputs to testing methodology developed on an on-going basis.
- Inputs to standards development submitted as per standards development programme.

6. REQUIREMENTS FOR THIS JOB:

a. Qualification and Training

Essential:

- A Bachelor's Degree in Computer Science or Information Technology;
- Training in Database Management Systems (DBMS) administration and maintenance, database design, analysis, and management.

b. Experience and Knowledge

- At least 2 years' experience working in a similar capacity.
- In-depth knowledge of Structured Query Language (SQL) and normalized relational databases.
- Knowledge of applicable data privacy practices and laws.
- Good working knowledge of Operating Systems such as Windows, Unix.
- Exposure to database systems.
- Excellent understanding of multi-disciplinary nature of IT solutions.

c. Competencies

The incumbent is a senior public servant who works with a team of professionals in realizing the goals and objectives of the Department, in a highly dynamic environment. The following competencies are required for the effective performance of this job:

- Sound understanding of project management principles.
- An understanding of database structures, theories, principles, and practices.
- A deep understanding of the interdependent relationship between infrastructure, information security and the applications/services they enable as well as the criticality of maintaining strong connections between the respective teams within IT.
- Ability to see the "big picture" across such areas as private and public hosted infrastructure and services, identity management, security, telecommunications, enterprise storage, end user experience, and training/education.
- Analytical Thinking, Decision Making, and Problem Solving: The capacity to analyze problems promptly, choose between alternatives, and effect meaningful solutions.
- **Managing the Client Interface:** Ability to work effectively with others, both internal and external to the Department, to deliver acceptable, customer-oriented and high quality service.
- **Collaboration and Team Work**: The ability to be a collaborative business leader, and an inspiring IT professional who shows a genuine intention to participate and work co-operatively with others in pursuit of team goals.
- **Customer and Quality Focus:** The ability to continuously ensure high standards of quality and service delivery to meet customers' expectations.
- Ability to work effectively under pressure
- **Interpersonal skills**: The ability to display sensitivity towards others, interact collaboratively with colleagues, and to build long term internal and external relationships and gain support to achieve desired objectives.
- **Performance Management**: The ability to align resources, systems, standards and activities to effectively, efficiently and consistently meet the goals and strategic objectives of the Department are met in a consistent, effective and efficient manner.
- **Leadership and Team Building**: The ability to provide vision, direction, allocate responsibilities, delegate and motivate staff in one's team, to include leading by example.
- **Strategic Vision**: The ability to develop a clear vision of the desired future state of the Department, demonstrate awareness of and or anticipate changing environmental trends, industry opportunities and threats/risks.

- **Strategic Planning**: The ability to develop effective plans in keeping with the Department's objectives, including to effectively review policy issues, determine priorities, and set medium and long term goals.
- **Change Management**: The ability to maintain effectiveness in a changing environment and the willingness to respond quickly and positively to change, and to lead others through change and manage their concerns.
- **Emotional Intelligence**: Possession of self-awareness, self-management, social awareness, and social skills The ability to display behaviors appropriate to the AGD's business and social environment.
- **Integrity**: The ability to consistently demonstrate sound ethical standards, observe the codes of conduct for employees and codes of professional practice, and show consistency between established values and behaviors, in order to build trust and credibility.
- **Oral and Written Communication**: The ability to communicate proficiently orally, in writing, and in one- on- ones face- to- face, with excellent public speaking skills.

9. SPECIAL CONDITIONS ASSOCIATED WITH THE JOB

Physical Demands - Pressured working conditions with numerous critical deadlines.

Work Environment - Normal office conditions