



## IDENTIFICATION

Department	Position Title	
Finance	Database Administrator	
Position Number	Community	Division/Region
15-11232	Yellowknife	Information Systems Shared Services

## PURPOSE OF THE POSITION

The Database Administrator is responsible for the day-to-day implementation and operations of data and database management services for the Information Systems Shared Service (ISSS). This includes core database and data warehouse architecture, as well as business intelligence, visualization, and analytics platform services to support operational and strategic planning and decision-making for GNWT departments.

## SCOPE

Located in Yellowknife and reporting to the Manager, Data and Analytics within the ISSS, the Database Administrator undertakes the implementation and maintenance of databases and database platforms for storage of, and access to, data in support of program information needs. The Database Administrator is responsible for the design of the physical data layer, addressing enterprise data resource needs, and contributing to the planning and design of database architecture, physical and virtual database platforms, and data warehouse structures required to support business intelligence, data analytics, and reporting services.

The incumbent completes the installation, configuration, upgrade, administration, monitoring, and maintenance of databases. They provide support for and improve the performance of operational databases in production, development, and testing environments and contribute to the design or selection of the tools and processes for database administration, including automation.

The work includes designing, configuring, and managing databases to ensure the integrity, security, and accessibility of the organization's data. The incumbent will assist in the design of, and implement, approaches to improve database performance, capacity, and scalability.



Services are delivered to GNWT departments and the NWT Housing Corporation.

The Incumbent works under general direction, uses discretion in identifying and responding to complex issues and assignments, determines when issues should be escalated to a higher level, receives specific direction, accepts guidance, and has work reviewed at agreed milestones.

The incumbent interacts with and influences colleagues, has working level contact with clients, suppliers, and partners, and may make decisions which impact the work assigned to individuals or phases of projects including the work of staff in other departments. They must understand and collaborate on the analysis of user/client needs and represent this in their work.

The incumbent performs a range of work, sometimes complex and non-routine, in a variety of environments and applies a methodical approach to issue definition and resolution.

The incumbent has sound generic, domain, and specialist knowledge necessary to perform effectively in the organization, typically gained from recognized bodies of knowledge and organizational information and demonstrates effective application of that knowledge, with an appreciation of the wider business context. They take action to develop their own knowledge.

## **RESPONSIBILITIES**

**1. Develops appropriate physical database, database platform (e.g., data warehouse) design elements, within set policies, to meet business change or development project data requirements.**

- Interprets installation standards to meet project needs and produces database or data warehouse component specifications.
- Assesses proposed changes to object/data structures to evaluate alternative options.
- Implements physical database designs to support transactional data requirements for performance and availability.
- Contributes to the design characteristics of database management systems (DBMS) or data warehouse products/services.
- Assists with designing, and implements, approaches to improve database performance, capacity, and scalability.

**2. Executes procedures and maintains documentation for databases and data platforms.**

- Uses database management system software and tools to collect agreed performance statistics.
- Carries out agreed database maintenance and administration tasks.
- Configures database parameters and defines data repository requirements, data dictionaries, and data warehousing requirements.



- Carries out routine configuration, installation, and reconfiguration of database and related products.
- Performs backup and recovery of data, using database management systems/solutions.
- Configures tools to enable automation of database administration tasks.
- Contributes to identifying problems and issues and recommends corrective actions.

**3. Applies a variety of visualisation techniques and designs the content and appearance of data visuals.**

- Operationalises and automates activities for efficient and timely production of data visuals and reports.
- Implements selected appropriate visualisation approach.
- Contributes to exploration and experimentation in data visualization.

**4. Applies and ensures compliance of security administration procedures.**

- Investigates security breaches in accordance with established procedures.
- Assists users in defining their access rights and privileges.
- Performs standard security administration tasks and resolves security administration issues.

**5. Performs release management activities associated with small to medium system implementations, upgrades, and enhancements.**

- Assesses and analyses release components for data management and storage requirements.
- Carries out the database builds and tests in coordination with testers, business analysts, and project managers.
- Ensures appropriate documentation and configuration records are developed and maintained.
- Ensures release processes and procedures are applied.
- Carries out early life support activities such as providing support advice to initial users.

**WORKING CONDITIONS**

**Physical Demands**

No unusual demands.

**Environmental Conditions**

No unusual demands.

**Sensory Demands**

No unusual demands.



## **Mental Demands**

This position undertakes work on which there are client expectations for quality and timely completion of activities with a particular emphasis on responsiveness in addressing service management issues. The Database Administrator will be under pressure to deliver operational services that contribute to meeting client expectations and business requirements while also meeting demands for new services and to participate in projects. Overtime will be required occasionally to provide operational services, implement changes, and respond to urgent incidents and service requests.

## **KNOWLEDGE, SKILLS AND ABILITIES**

- Knowledge of database design principles and practices.
- Knowledge of database software platforms including relational database management platforms, business intelligence and analytics, and tuning and optimization methods.
- Experience with database administration systems and tools including performance tuning, data backup and recovery.
- Knowledge of IT service management concepts such as those described in the IT Infrastructure Library (ITIL), Control Objects for IT (CoBIT), Dev/Ops, and Lean IT, particularly related to Incident Management and demand management.
- Awareness of Project Management practices such as those described in the Project Management Body of Knowledge (PMBOK).
- Awareness of Business Analysis practices such as those defined by the International Institute of Business Analysis (IIBM) Business Analysis Body of Knowledge (BABOK Guide).
- Knowledge of the software development lifecycle, as well as the various methodologies including predictive (plan-driven) approaches or adaptive (iterative/agile).
- Awareness of software development methods, practices, and processes.
- Ability to assess and evaluate risk and impact to effectively prioritize.
- Ability to maintain an awareness of developments in the industry.
- Verbal and written skills, able to convey complex technical issues to a non-technical audience.
- Works independently with general supervision.
- Problems faced are difficult but typically not complex.
- May influence others within the job area through explanation of facts, policies, and practices.
- Plans, schedules, and monitors own work competently within limited deadlines and according to relevant legislation, standards, and procedures.
- The incumbent understands how own role impacts security and demonstrates routine security practice and knowledge required for own work.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion, and cultural awareness, as well as safety and sensitivity approaches in the workplace.



**Typically, the above qualifications would be attained by:**

Completion of an undergraduate degree in computer science, management information systems or business with 2 years of experience in database design, administration, and implementation.

Equivalent combinations of education and experience will be considered.

**ADDITIONAL REQUIREMENTS**

**Position Security** (check one)

- No criminal records check required.
- Position of Trust – criminal records check required.
- Highly sensitive position – requires verification of identity and a criminal records check.

**French language** (check one if applicable)

- French required (must identify required level below)  
Level required for this Designated Position is:  
ORAL EXPRESSION AND COMPREHENSION  
Basic (B)  Intermediate (I)  Advanced (A)   
READING COMPREHENSION:  
Basic (B)  Intermediate (I)  Advanced (A)   
WRITING SKILLS:  
Basic (B)  Intermediate (I)  Advanced (A)
- French preferred

**Indigenous language:** Select language

- Required
- Preferred