



National Student Financial Aid Scheme

Job Specification & Recruiting Profile of Vacancy

25 August 2023

The following vacancy exists at NSFAS in Cape Town.

Position	Senior Database Administrator	Type & Grade	Permanent - C4
Vacancy No	21 of 2023/24	Department & Unit	ICT-Technology

POSITION OVERVIEW:

The main purpose of the job is to design, implementing, managing, and optimizing the organization's database systems, with a strong focus on cloud-based technologies. You will be responsible for ensuring the performance, availability, and security of the databases, as well as working closely with cross-functional teams to support application development, data management, and business intelligence initiatives

RESPONSIBILITIES:

Policy, Systems & Procedure Development

- implementation of the NSFAS database process in line with policy requirements
- service and resolve all queries that emanate from the business relating to systems databases
- Implement and maintain all security policies relating to databases.

Core Objectives Implementation

- **Database Design and Implementation:** Designing and implementing database systems, including database schemas, data models, and data migration strategies, utilizing best practices and industry standards. Ensuring optimal database performance, scalability, and availability in a cloud-based environment.
- **Database Administration and Optimization:** Managing and monitoring the performance, availability, and security of the organization's database systems, including performing regular database maintenance, backups, and disaster recovery operations. Identifying and resolving database performance and security issues and optimizing database configurations for optimal performance.
- **Cloud-Based Database Technologies:** Extensive knowledge and experience with cloud-based database technologies, such as Amazon RDS, Azure SQL Database, or Google Cloud SQL, including provisioning, configuration, monitoring, and optimization of cloud-based databases.
- **Database Security and Compliance:** Implementing and managing robust database security measures, including access controls, authentication, authorization, encryption, and auditing, to protect sensitive data and ensure compliance with relevant regulations and policies, such as GDPR, HIPAA, or PCI-DSS.
- **Database Troubleshooting and Incident Resolution:** Proactively monitoring and troubleshooting database incidents and problems, identifying root causes, and resolving issues in a timely and effective manner. Collaborating with cross-functional teams, vendors, and support providers to resolve complex database issues.
- **Database Performance Tuning and Optimization:** Analysing database performance metrics, identifying performance bottlenecks, and optimizing database configurations, indexes, queries, and other database objects to achieve optimal database performance and ensure efficient data retrieval and storage.
- **Database Backup, Recovery, and Disaster Recovery:** Designing and implementing database backup, recovery, and disaster recovery strategies, including regular backups, database replication, and failover/failback procedures, to ensure data integrity, availability, and business continuity.
- **Database Documentation and Reporting:** Creating and maintaining comprehensive documentation of database designs, configurations, procedures, and troubleshooting guides. Generating regular reports on database performance, incidents, and activities to management and stakeholders.
- **Cloud Migration and Integration:** Experience with cloud migration strategies and technologies, such as database migration service tools, data transfer methods, and cloud database integration patterns, to migrate on-premises databases to cloud-based environments or integrate with other cloud

services.

- Database Automation and Scripting: Utilizing automation and scripting tools to streamline database management tasks, such as database provisioning, configuration, patching, and monitoring, to ensure efficient and consistent database operations.

Stakeholder Management & Relationships

- Provide development support as per request within agreed SLA.
- Ensure no rejections from requestor.
- Provide UAT support as per request within agreed SLA.
- Receive stakeholder queries.
- Resolve stakeholder queries within given time frame.
- Produce timeous and accurate reports.
- Runs tools to check efficiency of systems and tunes if necessary (i.e., monitoring performance database for speed, sending appropriate error messages/alerts when needed, etc).
- Responds to and resolves errors and/or alerts.
- Develops, monitors, and reports key performance indicators.
- Establishes and tracks service level agreements.

Project Facilitation & Implementation

- To Plan and implement projects to address identified needs as per the ICT strategy.
- Compile project reports on completion of the project to evaluate return on investment.

Budget Optimisation

- To Make inputs to the expenditure in line with core activities and projects
 - Provide reconciled payments and recover and any overpayments from the database.
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Compliance Monitoring & Evaluation

- Facilitate the process of verification, compliance, registration and deregistration from business.
- Implement identified key controls and established risk mitigation procedures for all the databases.
- Assess and improve the audit, risk and compliance outlook.
- Implement the audit plan as per the ICT strategy.

Information & Knowledge Management

- To collaborate with stakeholders to build systems that enable the management of data obtained from different sources.
- To collaborate with stakeholders to use their experience, education and understanding to obtain knowledge from this information.

Reporting & Accountability

- On the unit's cloud system status
- On the cloud systems operational plan progress
- On cloud systems issues and interventions management
- On internal and external audit and risk.
- On any other work in the mandate of the ongoing cloud infrastructure and networks team

DESIRED SKILLS AND EXPERIENCE

Minimum requirements:

- Bachelor's degree in computer science, Information Technology, or related field (NQF level 7)
 - ITIL
 - Relevant certifications, such as AWS Certified Database - Specialty, Microsoft Certified: Azure
 - Virtualisation Certification
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- 8 years of experience as a Server DBA or similar role
 - 5 years of experience with Server Administration experience required.
 - 8 years of experience with Performance Tuning and Optimization (PTO)
 - Experience in migrating on-premises databases to cloud-based environments or integrating databases with other cloud services.
 - 8 years of experience with backups, restores and recovery models.
 - Experience in High Availability (HA) and Disaster Recovery (DR) options.

Experience on different database platforms i.e. NoSQL, MongoDB,

Preferred:

- 10 years of experience in a Database architecture or similar role
- 7 years working on Cloud database platforms.
- Financial sector experience.
- Preferred application development experience with C#, Java, JavaScript, Python, or similar programming languages

Skill and Competencies:

- Communication Skills
- Interpersonal Skills
- Advanced Troubleshooting skills
- Presentation Skills
- Report writing skills.
- Problem Solving Skills
- Planning Skills

REMUNERATION & BENEFITS

Remuneration Package: R 783 108 to R 895 383 per annum

Total Cost to Company per annum inclusive of all benefits and company contributions

PLEASE NOTE

Closing date: 8 September 2023

Interested applicants must complete and submit an Employment Application Form available on the NSFAS website. The form must be supported by a detailed Curriculum Vitae which includes amongst other things the vacancy name/position title you are responding to, copies of academic qualifications, Identity Document, and names of three contactable referees. The response must be addressed to the attention of Ms. Thokozile Mnikina via the following email address: jobs@nsfas.org.za.

Please note the following contact details are for enquiries about JOB CONTENT ONLY and NOT for application purposes.

For Enquiries please contact: Email: thokozilem@nsfas.org.za

The NSFAS does not consider late applications. The NSFAS talent acquisition team only corresponds with shortlisted Candidates. Should you not hear from the NSFAS talent acquisition team within 2 months from the closing date, please consider your application unsuccessful.

** NSFAS committed to employment equity. Preference will be given to candidates who improve employment equity considerations **

“NSFAS is committed to providing equal opportunities and practicing affirmative action employment. It is our intention to promote representivity (race, gender, disability) in the organisation through filling of this position and candidates whose appointment will promote representivity will receive preference.
