

## Job Description

**Job Title:** Database Administrator II

**Supervisor:** Supervisor of Technology Operations

**Position Code:** OE23

**Pay Grade:** 42

**Job Classification:** Exempt

**Contract Length:** 245 Days

### Job Summary

Position is responsible to the Supervisor of Technology Operations, for the district-wide implementation, maintenance and administration of the school division's large-scale, complex, database management systems which support mission-critical operations. The position ensures the availability, integrity, security, and efficiency of assigned databases. The position is also responsible for documenting, managing, and maintaining assigned implementation and project plans. Position establishes and interprets policies and operating procedures; evaluates database operations; prepares budgeting and cost analyses. Work requires highly professional customer service to staff and students. Position supervises and evaluates work performance of assigned staff.

### Essential Duties

1. Consults with departmental functional managers to assess database system needs and objectives; interacts with programming staff to review proposed database applications requirements; evaluates the impact on the database management system; and conducts feasibility studies and cost benefit analyses.
2. Designs, implements, and maintains database management system structures and server configurations that support user needs, ensuring that the logical database design is completed, validated, and translated into the physical file structures and access methods of the system; designs and implements a data archive plan for retaining and disposing of data files.
3. Defines and establishes physical database parameters such as location and access method; and calculates optimum values such as the amount of computer memory to be utilized; defines, specifies, and maintains access levels and system privileges for users.
4. Develops, maintains, and manages database dictionaries with descriptions of data elements; database system performance standards and criteria; conducts system tests to determine the integrity of the database; and makes necessary changes.
5. Determines requirements and guidelines for database system/server backups; and develops, tests, and implements plans for database recovery.
6. Develops and administers database security systems and procedures to safeguard databases against accidental or unauthorized modification, destruction, or disclosure; implements system enhancements, upgrades and improvements.
7. Monitors database system access and conducts system audits to identify security violations.
8. Diagnoses and troubleshoots system failures and determines logical solutions to complex system administration problems.
9. Monitors and analyzes database management system/server usage and performance factors (i.e.: CPU time, response time, disk usage, distribution of records, and core requirements); and restructures the system for optimal performance.
10. Performs data modeling and simulations for pilot projects.
11. Analyzes current database management systems and makes recommendations for the procurement and installation of new systems.
12. Assesses training needs and conducts individual/small group training to end-users and technical staff in database use.
13. Prepares and maintains documentation of database system operations; documents and performs research to justify language used in departmental documents, procedures and budget recommendations; presents status reports, service level benchmarks, key performance indicators, and operational metrics for assigned systems.
14. Defines bid and RFP technical requirements to ensure appropriate system/database provisions.
15. Conforms to all departmental procedures and policies.
16. Tracks and assigns work in the help desk system.
17. Models nondiscriminatory practices in all activities.

(These are intended only as illustrations of the various types of work performed. The omission of specific duties does not exclude them from the position if the work is similar, related, or a logical assignment to the position.)

### **Other Duties**

1. Maintains a current knowledge of rapidly changing technology systems.
2. Performs any other related duties as assigned by the Supervisor of Technology Information Services, or other appropriate administrator.

### **Job Specifications**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily with minimal supervision. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodation may be made to enable individuals with disabilities, who are otherwise qualified, to perform the essential functions.

### **Minimum Qualifications (Knowledge, Skills and Abilities Required)**

Must possess a Bachelor's degree in computer science or a related field and significant experience in database administration using Microsoft Server Operating Systems, Microsoft SQL, Sun Solaris, and Oracle DBMS; or any equivalent combination of education and experience to include industry certifications that provide the noted knowledge, skills, and abilities to perform the essential duties. Must possess a comprehensive knowledge in implementing and maintaining database management systems and design techniques and demonstrate the ability to design database system structures and server configurations. Must possess a comprehensive knowledge of database system performance monitoring/tuning; capacity planning; testing and restructuring; database backup and recovery and security techniques. Must possess and the ability to analyze system requirements; conduct feasibility studies; and develop database management system standards, procedures, specifications, and documentation; possess the ability to analyze and resolve system problems related to database design and systems operations. Experience in the implementation of integrated student information, financial, work order tracking, and human resources/payroll systems is preferred. Must possess demonstrated successful experience in project planning and management (e.g., new installations, upgrades) involving multiples customer sites. Experience in writing system documentation, system specifications, system requirements, project plans, presentations, correspondence, studies, reports, and training materials. Be able to demonstrate ability to properly develop and maintain accurate documentation. Must possess the ability to establish and maintain effective working relationships with departmental peers, departmental technicians and specialist, and all customers served. Must have the ability to direct the efforts and evaluate the work of assigned staff. Must have the ability to effectively explain complex technical concepts to both technical and non-technical personnel. Must possess a valid Virginia driver's license with a good driving record.

### **Working Conditions and Physical Requirements**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodation may be made to enable individuals with disabilities to perform essential functions.

When performing the duties of this job, the employee is frequently required to sit; use hand to finger; handle or feel; speak, hear and understand speech at normal levels. The employee is frequently required to stand; walk; reach with hands and arms; climb or balance; stoop; kneel; crouch; or crawl. The employee must frequently lift and/or move and push/pull up to 26 pounds. The employee must occasionally lift and/or move and/or balance while standing or climbing up to 60 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision and depth perception.

### **Work Environment**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Duties are normally performed in an office environment, centralized computer rooms, on-site locations and outside in the open environment. While performing the duties of this job, the employee is occasionally exposed to various lighting conditions; moving mechanical parts; high precarious places; toxic or caustic chemicals; and risk of electrical shock. The noise level is usually moderate and occasionally loud when performing duties in centralized computer rooms.

**Supervision Exercised:** None

**Supervision Received:** Supervisor of Technology Operations

*This job description in no way states or implies that these are the only duties to be performed by this employee. The Database Administrator II will be required to follow any other instructions and to perform any other related duties as assigned by the Supervisor of Technology Operations, or appropriate administrator. Newport News Public Schools reserves the right to update, revise or change this job description and related duties at any time.*

**Approvals:**

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Supervisor

Date

**I acknowledge that I have received and read this job description.**

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Employee Name (Print)

Signature

Date

Revised 01/19 CR