

University of Virginia

Job Summary

Job Code:	Job Title:	Database Administrator IV
UVA Survey Code:	UVA Survey Code Title:	
Pay Band:	Career Path:	Database Administration
FLSA Status:	Management or Individual Contributor:	Individual Contributor

Position Summary: Describe below the primary purpose and function of this job.

Design, develop, implement, and maintain the University's computerized databases and database applications to accommodate a variety of student, faculty, and employee needs.

Key Roles & Responsibilities: List up to 6 key roles and responsibilities of this job.

1. Plan and configure the physical database environment including data storage. Perform quality control and auditing activities to ensure the physical integrity of all production databases. Administer and control the activities related to data planning and development and the establishment of policies and procedures pertaining to its management, security, access strategy, maintenance, and utilization.
2. Diagnose and resolve problems to the environment. Implement preventive measures including backups, disaster recovery, and replication. Recommend and oversee implementation of system level configuration modifications to optimize performance. Collaborate on capacity planning strategy and processes.
3. Design and establish standards for database environments, physical structure, and specialized database applications to optimize resources. Direct the maintenance and use of the corporate data dictionary. Define logical attributes and inter-relationships and design data structures to accommodate database production, storage, maintenance and accessibility. Address database integration issues including migration between disparate databases, integration, maintenance/conversion, capacity planning issues, and new applications.
4. Provide advice to programmers in the effective use of database languages; advise on troubleshooting, exception processing needs, and other data management issues. Assist development teams in determining database environment requirements. Gather client and user requirements and translate them to a technical specification. Perform project management activities as required.
5. Advise management on database concepts and functional capabilities. Analyze and determine informational needs and elements, data relationships and attributes, proposed manipulation, data flow and storage requirements and data output and reporting capabilities. Determine and anticipate impact of business decisions and cyclical events on data availability and performance. Evaluate and recommend technologies such as DBMS, servers, extract and conditioning tools, metadata management, security tools and archival and recovery tools.
6. Create and maintain database related documents such as manuals and programmer handbooks.

Expertise: Describe the requirement for knowledge and expertise about the subject area as well as how various parts of the University work together to achieve objectives. Explain the degree of understanding required of the industry and university environment.

As a senior staff member, incumbent is required to have an advanced understanding of his/her discipline including all required certifications as well as an advanced understanding of the business environment of a large university system. Incumbent must demonstrate an in-depth understanding of the University system, its policies, and its operating procedures. Incumbent must have demonstrated project management skills and the ability to work within a matrixed environment if necessary. Incumbent is expected to maintain currency of knowledge with respect to relevant state-of-the-art technology, equipment, and/or systems.

Incumbent must be able to interpret data models and develop database structures; use standard diagramming techniques to design and develop computer data models; implement and troubleshoot programming changes and modifications; program, configure, manage, and maintain the operation of complex relational databases; and develop and manipulate large, complex data sets. Knowledge of data integrity techniques and computer and/or network security systems and applications is required. Technical writing skills are also required.

Problem Solving: Describe the nature and complexity of the problems this position encounters on a recurring basis. Include information regarding the level of innovation required, if any, and include mention of environmental factors that may add to the complexity of resolving issues.

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Incumbent will address complex problems and will use experience and judgment in creating solutions. Incumbent seeks assistance when significant deviations are proposed, or when unprecedented problems arise. Incumbent develops approaches to problem-solving and anticipates/mitigates potential issues.

Nature & Area of Impact: To what degree does this job affect the University (i.e., through interactions with faculty or students, making decisions, defining or setting strategy, etc.)? What is the breadth of the impact that this job has, either positive or negative (i.e., affects own team, department, function, business unit, entire university, etc.)?

Impact is felt within the team/department for which the incumbent works and within multiple, coordinating departments. Work quality, decision-making and long-term project management can affect the productivity of students, faculty and/or staff. Impact of errors is substantial and usually university-wide though mostly short-lived.

Interactions / Interpersonal Skills: Describe the nature and level of interactions this job has with others, both internally and externally. Explain any specific interpersonal skills necessary to successfully perform this role (i.e., negotiation skills, represents business at external events or to governmental bodies, etc.).

Interactions are with fellow team members and coordinating team members, but the incumbent will also have interactions with assigned student, faculty, or staff clients. Incumbent works with and may manage external vendors and service providers. Incumbent should possess superior verbal and written communication skills to convey technical guidance and information to users and to provide excellent customer service. Incumbent will train and provide guidance to more junior staff members and provide management with input into performance evaluations. Incumbent may provide guidance to management on critical technology issues. Incumbent is recognized as a technical authority within the University.

Distinguishing Characteristics

This is the senior or lead level for the discipline. Incumbent possesses all requirements and skills for Level 3 and has achieved proficiency in the typical tasks assigned to Level 3.

- **Skills:** Distinguished from Level 3 skills in that the Level 4 incumbent has fully developed his/her advanced technical skills.
- **Level of Work:** Distinguished from Level 3 work by highly complex and strategically significant activities. Assignments at Level 4 are usually long-term and the incumbent has significant latitude to devise the approach and method to performing the assignment.
- **Supervision:** Distinguished from Level 3 by the complexity and duration of assignments. Level 4 assignments are typically multi-faceted, may be cross-discipline and require significant coordination and planning by the incumbent. Level 4 incumbents regularly perform long-term and non-routine assignments with only general supervisory intervention. Also distinguished from Level 3 in that the incumbent serves as a resource to Level 1, 2 and 3 incumbents on complex problems. Level 4 incumbents will often train Level 1, 2 and 3 incumbents on work processes and policies and assist management with developing their technical skills. Level 4 has input into hiring decisions and staff performance assessments, but does not directly supervise.
- **Interactions:** Distinguished from Level 3 in that the Level 4 incumbent regularly works beyond his/her own team and often externally. The Level 4 incumbent regularly works with related teams, client groups, management and vendors and interactions may include influencing others.
- **Focus:** Distinguished from Level 3 in that the Level 4 incumbent regularly works toward specific team goals and client goals, and assists in establishing department processes and standards.

Job Requirements And Qualifications: Indicate the minimum and preferred education and experience for this job and any licenses and certifications required.

Minimum Education:	Bachelor's degree or equivalent experience in Computer Science, MIS, Computer Engineering or related disciplines.	Preferred Education:	Master's degree in Computer Science, MIS, Computer Engineering or related discipline.
Minimum Experience:	5-7 years	Preferred Experience:	7-10 years

Required Licenses/Certifications: Microsoft Certified SQL Server DBA, Oracle Certified DBA