

Job Description

Position: Database/Application Architect
Department: Technology/Application Services
Reports To: Information Technology Officer

Job Summary:

The Database/Application Architect's core responsibility is the definition, implementation, and governance of the logical architecture of the agency-wide software systems, applications and databases. He/She will evaluate databases, applications and systems not only to meet current business needs of the company, but to meet future business needs too. He / She should apply varied hardware engineering and software design theories to produce robust, integrated functioning of various systems and technology interfaces. He/She will assess functioning of overall technology and communications systems to look for ways to upgrade and optimize systems in the future. He /She will participate in projects to upgrade or implement new or existing applications, networks, databases, operating system platforms or enterprise software. The application architect should have experience in defining the architecture of N-Tier and messaging-based enterprise applications. The role of the person in this position is to expand the company's use of data as a strategic enabler of corporate goals and objectives.

Essential Job Functions:

- ❑ Reports directly to the Information Technology Officer.
- ❑ May serve as lead or technical expert to define and maintain the architectural frameworks/patterns, processes, standards and guidelines for system development specifically around application architecture, integration architecture and Technology Controls.
- ❑ Provide technical and architectural subject matter expertise to the various application management teams including communicating architectural decisions and mentoring other technical staff around the various development technologies and decisions.
- ❑ Review and assess development design to ensure robustness of system design, adherence to standards and processes, the delivery of stable and scalable systems, and to ensure that risk mitigation and controls are in place.
- ❑ Confer with business units and application development staff to understand both the business and technical requirements and to define architectural constraints on proposed application development projects or increases in scale of production software.
- ❑ Provides expertise in the business processes supported by the application.
- ❑ Provides knowledge & guidance for technical integrations of all internal applications including assistance in vendor selections.
- ❑ Collects, verifies, and documents application technical procedures and standards.
- ❑ Provides support in installation, deployment, infrastructure management and upgrades of all agency wide application system
- ❑ Provides help in creating RFP's, and requirements needs evaluation for new applications agency wide
- ❑ Provides help in evaluation of new technological solutions for effective management of data agency wide
- ❑ Plans and evaluates management infrastructure for key production application, involves management of test system, recovery system and storage of both actual and recovery data.
- ❑ Proactively seeks application best practices to gain a deeper knowledge of corporate preferred tools.
- ❑ Writes technical approach and design documentation
- ❑ Demonstrates understanding of the inter-relationship among various technology applications and systems.
- ❑ Demonstrates proficiency with all applicable company supported software applications.
- ❑ May serve as lead, technical expert, or project manager with team(s) concerned with application development, networking and project management to coordinate changes and support enterprise technology initiatives.
- ❑ Oversee multiple projects in order to preserve the vision and protect the application owners' interests as well as meeting operational and financial reporting requirements during system development and enhancements.

- ❑ Collaborates with department managers to define hardware/software requirements, plan and execute the integration of acquisition applications and corporate initiatives, and coordinate project schedules, budgets, management requests and work authorizations.
- ❑ Works on complex medium to large size projects. Works with Business Owners on assigned projects by defining, developing, testing, documenting, and implementing PMP standards, scheduled time lines, and project budgets.
- ❑ Manages multiple projects that may have competing business and technology requirements.
- ❑ Manages enterprise wide functional resources and consultants during all phases of projects.
- ❑ Works with department managers to assist in negotiations for resources to ensure resource availability, workload and performance.
- ❑ Develops, communicates, and monitors project schedules and resource plans.
- ❑ Ensures the project team remains within the defined scope of the project.
- ❑ Drives to resolution any issues that may hinder project success.
- ❑ Maintains project documentation and metrics.
- ❑ Works with Business Owners and other Project Managers to drive project vision through effective risk management and manage changes through a defined change management system.
- ❑ Contributes to a knowledge-sharing environment by creating project documents and giving presentations.
- ❑ Actively participates in the development and refinement of Project Management methodologies and tools
- ❑ Able to initiate conceptual ideas with practical applications.
- ❑ Able to develop and implement project plans
- ❑ Demonstrates a thorough understanding of infrastructure associated with supported applications.
- ❑ Basic understanding of the strategic alignment of Technology solutions with business objectives.
- ❑ Manages Production system updates / upgrades to all critical application
- ❑ Designs Data Architectures.
- ❑ Develops strategies for data acquisitions, archive recovery, and implementation of a database including security protocols
- ❑ Design, develop and supervise database back-up, database security and data maintenance.
- ❑ Manages infrastructure / storage / web and deployment needs for all production system
- ❑ Key partner in establishing and troubleshooting functional issues in application with functional experts.
- ❑ Come with solutions to support 24x7 applications by designing fail-over system and determine MTTR and MTBF from database and application point of view. Design standby systems and fail-over systems.
- ❑ Ability to effectively troubleshoot and resolve problems at the database, application, server, network and client levels
- ❑ Demonstrates increased level of leadership and software project management

Required Knowledge, Abilities and Skills essential to Job Functions:

- ❑ Working knowledge of database architecture, terminology, processes
- ❑ Extensive use and knowledge of SQL, PL/SQL, Import/Export/Load, backup and recovery
- ❑ Working knowledge of relational database technologies (OLTP, OLAP, ETL)
- ❑ Significant development experience in a Microsoft environment with C++, writing complex stored procedures, queries, views, and triggers is also required.
- ❑ Strong candidates will have mastered physical database design and have expertise with database indexing, statistics and tuning
- ❑ Candidate must be able to work in a production environment where unplanned downtime is not acceptable
- ❑ PC hardware configuration, networking concepts and terminology
- ❑ Ability to effectively convey information and work well in a structured environment with other team members

- ❑ Ability to communicate effectively with different levels of management as well as both the business and technical communities. Good critical and analytical thinking
- ❑ Ability to solve problems quickly and completely
- ❑ Ability to handle multiple tasks and deadline simultaneously
- ❑ Excellent written and verbal skills

Qualifications

Training and/or Education:

BS in Computer Science, Systems Engineering, Management Information Systems or Information Systems or Related Field.

Required Experience:

4-5 years Oracle DBA experience in a production environment.

Extensive Oracle database programming/scripting/development experience.

4-5 years proven experience in enterprise application systems administration and programming.

Extensive network infrastructure and technology background.

Licenses or Certificates:

Oracle Certification preferred

Special Requirements:

None

FLSA Status:

Exempt

Physical Demands:

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 accommodations may be made to enable individuals with disabilities to perform the essential functions.

Unusual Demands:

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. Work involves meeting multiple demands on a timely basis. Duties may require some overtime.

This job description summarizes the essential duties required for this position but in no way is inclusive of all duties. Other related duties may be assigned as needed by department head or supervisor. All changes must be requested through the Department of Human Resources.