

UTILITY DATABASE ANALYST

DEFINITION

Under general direction, performs professional level work in designing, installing, managing, updating, and securing a variety of database systems, including spatial and relational systems; provides support to Alameda Municipal Power (AMP) and other departments' staff relative to current and anticipated database systems; performs other related work as required.

DISTINGUISHING FEATURES

Positions in this classification are journey level and employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of standard operating procedures and policies. Positions exercise technical or functional supervision over lower level professional, technical and administrative support personnel.

EXAMPLES OF DUTIES

1. Plans, designs, configures, tests and installs relational databases for new systems and monitor for performance.
2. Maintains and upgrades existing systems and interfaces. Tests and installs patches, upgrades and monitors for performance security.
3. Designs and implements interfaces between database systems. Coordinates data integration of separate systems.
4. Develops and prepares data queries and reports as necessary using a variety of reporting interfaces, tools, and applications.
5. Optimizes database systems by performing routine maintenance procedures, including, but not limited to, re-indexing and updating statistics; checks for database consistency; and detects and repairs database corruption.
6. Audits databases for compliance.
7. Ensures security and privacy levels are maintained in all database systems. Administers, configures, and maintains spatial databases.
8. Manages files for desired database structure; monitors disk storage space and backup management activities; designs and implements backup and recovery plans; tests backup plans; performs backup activities (on-line, off-line and archive logs) at scheduled times.
9. Creates and maintains user permissions, system privileges, passwords, and other security methods; installs, administers, and monitors license management software; monitors database usage for security purposes; checks logs and files for evidence of problems and system failure.
10. Provides technical support in the planning of new database systems including hardware, operating systems, licensing and storage requirements.
11. Enforces data quality standards and performs quality control checks on associated data.
12. Creates and manages disk clusters, tables, indexes, and related systems and processes.
13. Monitors database performance against established standards; detects and troubleshoot problems.
14. Implements data recovery plan when necessary; prepares related project status reports as required.
15. Coordinates assigned functions with and provides support internally and externally, including other sections, divisions, departments, vendors, consultants, jurisdictions, agencies, and the general public; conducts user training on group or individual basis as needed; advises and trains information technology personnel on database issues. Partners with city departments and provides database solutions to meet business needs; integrates database solutions with other departments' enterprise solutions.
16. Prepares and maintains systems procedures and documentation; maintains and updates manuals, codebooks, templates, computer control tables, etc.; assists to develop database policies and procedures.

EMPLOYMENT STANDARDS

Education/Experience

Any combination equivalent to education and experience likely to provide the required knowledge and abilities. A typical way to obtain the knowledge and abilities would be:

Education: Graduation from an accredited four year college or university with major course work in computer information systems, business administration, database administration, business intelligence, systems analysis, system design, or related field.

Experience: Two years of responsible experience in database administration, data processing, programming, systems analysis, or systems design.

Knowledge

Knowledge of principles and practices of databases, servers, local area network storage, Windows Server operating systems and network terminology; principles and techniques of SQL, scripting, electronic data processing and application documentation; principles and practices of GIS theory and concepts; records storage and handling techniques; computer operating methods, languages, and procedures; complex database design, implementation, operation, maintenance, and data manipulation; research, analysis, and management related to databases; extract transform, and load methodologies; workflow and process improvement methodologies; technical report writing procedures; project management principles, practices and tools; and computer logic and mathematics.

Ability

Ability to work independently and perform professional work in support of information technology business operations, specifically AMP database systems, data management and analysis, and related network infrastructure; analyze, design, program, install and maintain highly technical and complex operating systems; troubleshoot, diagnose and resolve issues effectively; a variety of database systems and report development platforms; prepare written procedures for complex database solutions; write operating instructions and procedures for electronic data processing machine applications; coordinate with multiple parties, e.g., vendors, staff, and end users; install, configure, trouble-shoot database specific desktop/server hardware and software; maintain and administer security systems and methodologies; train and provide technical support to users in the use of various databases; learn and effectively use software specific to staff needs; read and interpret documents such as operating and maintenance instructions and technical procedure manuals; prepare reports, effectively present information and respond to questions from staff, vendors and the general public; define problems, collect data, establish facts and draw valid conclusions; interpret an extensive variety of technical instructions in diagram form and work effectively with abstract and concrete variables; schedule and perform work to meet established time lines; work independently with minimal supervision; establish and maintain accurate records; maintain level of knowledge required for satisfactory job performance; establish and maintain effective working relationships with vendors and staff at all levels.

Special Requirements

Willingness and/or ability to work outside regularly scheduled hours to meet operational needs and to respond to after hours emergency calls as required.

Other Requirements

Selected positions may require possession of a valid California Driver's License and satisfactory driving record as a condition of initial and continued employment.