

Water Authority Position Description

DATABASE ADMINISTRATOR III

Status	Position Code	Level	Date
APPROVED	DBA3	I30	Mar 2017

Job descriptions are intended to present a general list of the tasks/duties performed by employees within this job Classification. Job Descriptions are not intended to reflect all duties performed within the job.

POSITION SUMMARY

DESIGNS LOGICAL AND PHYSICAL DATA BASES AND COORDINATES DATA BASE DEVELOPMENT APPLYING KNOWLEDGE OF DATA BASE DESIGN STANDARDS AND DATA BASE MANAGEMENT SYSTEM. INDEPENDENTLY PERFORMS TECHNICAL EXPERTISE IN THE DESIGN, IMPLEMENTATION, AND MAINTENANCE OF COMPLEX RELATIONAL DATABASE MANAGEMENT SYSTEMS (RDBMSS) THAT SUPPORT AUTHORITY BUSINESS APPLICATIONS. RESPONSIBLE FOR MULTIPLE DATABASES THAT RUN AUTHORITY-WIDE BUSINESS APPLICATIONS WHICH ARE ACCESSED BY MULTIPLE DIVISIONS .

MIN EDUCATION & EXPERIENCE REQ

BACHELOR' DEGREE FROM AN ACCREDITED COLLEGE OR UNIVERSITY WITH MAJOR COURSE WORK IN INFORMATION SYSTEMS, COMPUTER SCIENCE OR A RELATED FIELD, PLUS ELEVEN (11) YEARS OF DATABASE ADMINISTRATION AND COMPUTER PROGRAMMING EXPERIENCE WITH CURRENT DATABASE PROGRAMMING LANGUAGES. REQUIRES PRIOR PROJECT MANAGEMENT SUPERVISORY OR TEAM LEADER EXPERIENCE MANAGING MULTIPLE, LARGE, CROSS-FUNCTION PROJECT WITH MANY KEY STAKEHOLDERS.

ADDITIONAL REQUIREMENTS

POSSESSION OF, OR ABILITY TO OBTAIN AND MAINTAIN A VALID AUTHORITY OPERATOR PERMIT (AOP)
POSSESSION OF A VALID NEW MEXICO DRIVER'S LICENSE

SUPERVISION RECEIVED/EXERCISED

RECEIVE GENERAL DIRECTION FROM CHIEF INFORMATION OFFICER.
PROVIDE GENERAL DIRECTION TO LOWER LEVEL TECHNICAL STAFF AND CONTRACTORS.
PROVIDE DIRECT SUPERVISION OF DATABASE ADMINISTRATION STAFF.
SERVE AS PROJECT LEAD AND SUBJECT MATTER EXPERT.

ESSENTIAL FUNCTIONS

1. DEVELOP AND MODIFY DATABASE MODELS BASED ON LOGICAL MODELS, DESIGNS AND REQUIREMENTS. DOCUMENT AND COMMUNICATE CHANGES.
2. PARTICIPATE IN SYSTEMS ANALYSIS, DESIGN AND IMPLEMENTATION. ADVISE AND CONSULT WITH APPLICATION PROGRAMMERS DURING SYSTEMS ANALYSIS.
3. DEFINE AUTHORITY-WIDE STANDARDS AND PREFERRED METHODOLOGIES FOR USE OF THE AUTHORITY'S DATABASE MANAGEMENT SYSTEM ENVIRONMENT AND ASSOCIATED APPLICATION DEVELOPMENT.
4. INSTALL AND MAINTAIN SOFTWARE FOR STANDARD DATABASE MANAGEMENT SYSTEMS AND DATA ADMINISTRATION SUPPORT. ESTABLISH PROCEDURES FOR DATABASE OPERATION, CONTROL AND RECOVERY.
5. MONITOR RELATIONAL DATABASES TO OPTIMIZE DATABASE PERFORMANCE, RESOURCE USE, AND PHYSICAL IMPLEMENTATIONS OF DATABASES. ADDRESS A VARIETY OF DATABASE INTEGRATION ISSUES INCLUDING MIGRATION BETWEEN DISPARATE DATABASES, INTEGRATION, MAINTENANCE, CONVERSION, CAPACITY PLANNING ISSUES, AND NEW APPLICATIONS.
6. DEVELOP AND MAINTAIN AN INTER-DIVISIONAL, WATER AUTHORITY-WIDE ENTERPRISE-LEVEL DATA MODEL IN A CENTRAL REPOSITORY.
7. DEFINE STANDARDS FOR DATA MODELING, CONCEPTUAL DATABASE DESIGN, DATA NAMING, AND METADATA DOCUMENTATION.
8. COORDINATE, REVIEW, AND APPROVE ALL LOGICAL AND PHYSICAL DATA MODELS.
9. TRANSFORM OR ASSIST IN THE TRANSFORMATION OF LOGICAL DATA MODELS TO PHYSICAL DATABASE DESIGNS.
10. PROVIDE TECHNICAL DIRECTION TO MEMBERS OF THE DATABASE ADMINISTRATION STAFF AND OTHER INFORMATION TECHNOLOGY PROJECTS.
11. COORDINATE TECHNICAL ACTIVITIES AMONG THE DATABASE ADMINISTRATION STAFF AND WITH OTHER INFORMATION TECHNOLOGY ENTITIES WITHIN AUTHORITY GOVERNMENT AND EXTERNAL AGENCIES.
12. MAINTAIN DEVELOPMENT, TEST, AND PRODUCTION RDBMS ENVIRONMENTS.
13. MONITOR AND MAINTAINS DATABASE SECURITY AND DATABASE SOFTWARE, IN COOPERATION WITH DATA SECURITY ADMINISTRATORS.
14. PROVIDES ADVICE TO APPLICATIONS PROGRAMMERS IN THE EFFECTIVE USE OF DATABASE LANGUAGES. ADVISE ON TROUBLESHOOTING, EXCEPTION PROCESSING NEEDS, AND OTHER DATA MANAGEMENT ISSUES.

15. MAINTAIN AVAILABILITY AND INTEGRITY OF DATABASES THROUGH MULTIPLE ACCESS SCHEMES. FACILITATE SHARING OF COMMON DATA BY OVERSEEING PROPER KEY AND INDEX MANAGEMENT AND DATA DICTIONARY MAINTENANCE.
16. MAY EVALUATE AND RECOMMEND TESTING AND EVALUATION OF NEW PROCEDURES, SOFTWARE, AND HARDWARE.
17. MONITOR AND MANAGE DATABASE BACKUPS, LOGS, AND JOURNALS. INSTALL, MAINTAIN, AND UPGRADE DATABASE SOFTWARE. RESTORE AND/OR RECOVER DATA AS REQUIRED; CREATES STANDBY AND DATA REPLICATION STRUCTURES TO SUPPORT CATASTROPHIC FAILURE AND DISASTER RECOVERY.
18. CREATE, PROCURE AND MAINTAIN VARIOUS DATABASE RELATED DOCUMENTS SUCH AS MANUALS AND PROGRAMMERS' HANDBOOKS.
19. MAINTAIN CURRENCY OF KNOWLEDGE WITH RESPECT TO RELEVANT STATE-OF-THE-ART TECHNOLOGY, EQUIPMENT, AND/OR SYSTEMS.
20. PROCURE AND MAINTAIN UP-TO-DATE, LEGAL SOFTWARE LICENSES FOR DATABASE SERVERS, CLIENTS AND END USER AND DEVELOPER TOOLS.
21. PARTICIPATE IN THE EMPLOYEE INTERVIEW/SELECTION PROCESS. TRAIN, EVALUATE AND COMMUNICATE WITH ASSIGNED STAFF. PROVIDE OR COORDINATE TRAINING. WORK WITH EMPLOYEES TO CORRECT DEFICIENCIES. IMPLEMENT DISCIPLINE AS NEEDED.
22. RESPONSIBLE FOR OVERALL ARCHITECTURE, DESIGN, DEVELOPMENT AND MAINTENANCE OF DATA WAREHOUSING AND DATA MART SYSTEMS AND SERVICES FOR THE ENTIRE ENTERPRISE.
23. WORKS CLOSELY WITH CUSTOMER FROM STRATEGIC PERSPECTIVE TO IDENTIFY AND MAXIMIZE OPPORTUNITIES TO UTILIZE DATA MARTS AND/OR A DATA WAREHOUSE SYSTEMS TO IMPROVE BUSINESS PROCESSES.
24. ENSURES DEVELOPMENT OF ENTERPRISE WIDE STANDARDS FOR THE DATA WAREHOUSE TO ENSURE COMPATIBILITY AND INTEGRATION OF MULTI-VENDOR PLATFORMS.
25. PROVIDES LEADERSHIP, VISION AND DIRECTION FOR DATA WAREHOUSE SYSTEMS, IN SUPPORT OF THE AUTHORITY'S BUSINESS OBJECTIVES AND REQUIREMENTS.

SUPPLEMENTAL FUNCTIONS

1. ATTEND AND PARTICIPATE IN PROFESSIONAL GROUP MEETINGS AND CONFERENCES. STAY ABREAST OF NEW TRENDS AND INNOVATIONS IN THE FIELD OF INFORMATION SYSTEMS.
2. PERFORM COMPLEX TECHNICAL, MANAGEMENT OR ADMINISTRATIVE TASKS REPORTING DIRECTLY TO THE CHIEF INFORMATION OFFICER, AS NEEDED.
3. MAY BE REQUIRED TO PROVIDE 24X7 ON-CALL SUPPORT.
4. PERFORM RELATED DUTIES AND RESPONSIBILITIES AS REQUIRED.

PREFERRED KNOWLEDGE

STRATEGIC PLANNING, DEVELOPMENT, IMPLEMENTATION AND MAINTENANCE OF
LARGE-SCALE INTEGRATED RELATIONAL DATABASE SYSTEMS.
MASTER PRINCIPLES AND PRACTICES OF DATABASE ADMINISTRATION
PRINCIPLES OF NETWORKS AND OPERATING SYSTEMS
ADVANCED PRINCIPLES OF STORAGE AREA NETWORK (SAN)
NETWORK ATTACHED STORAGE (NAS)
TAPE BACKUP SOLUTION PRACTICES AND PRINCIPLES
PRINCIPLES AND PRACTICES OF PROJECT MANAGEMENT
METHODS AND TECHNIQUES OF APPLICATIONS DEVELOPMENT AND COMMON DEVELOPMENT
LANGUAGES
PRINCIPLES AND PRACTICES OF SOFTWARE INSTALLATION
METHODS AND TECHNIQUES OF DATA MODELING AND CONCEPTUAL DATABASE DESIGN

OPERATIONAL CHARACTERISTICS OF APPLICABLE DATABASE MANAGEMENT SYSTEM,
INFORMATION SYSTEMS AND MAINFRAME ENVIRONMENTS
ADVANCED METHODS AND TECHNIQUES OF DATABASE DESIGN AND ADMINISTRATION
PRINCIPLES OF PROJECT MANAGEMENT
ORACLE AND SQL SERVER DATABASE TOOLS, ENVIRONMENTS AND QUERY LANGUAGES
(SQL.TSQL, PL/SQL) .NET

PREFERRED SKILL/ABILITY

MANAGE TIME EFFICIENTLY TO OPTIMIZE SERVICE TO CUSTOMERS
DEVELOP AND MODIFY DATABASE MODELS BASED ON AUTHORITY NEEDS
PERFORM VARIOUS DATABASE ADMINISTRATION FUNCTIONS
DEVELOP STANDARDS AND METHODOLOGIES FOR USE OF THE AUTHORITY'S DATABASE
MANAGEMENT SYSTEM
DEVELOP AND MAINTAIN DATA AND ENTITY RELATIONSHIP MODELS
EVALUATE, IMPLEMENT, MAINTAIN AND TRAIN OTHERS IN THE USE OF DATA
MODELING TOOLS
PARTICIPATE IN SYSTEMS ANALYSIS, DESIGN AND IMPLEMENTATION
MONITOR AND TROUBLESHOOT DATABASE PERFORMANCE
COMMUNICATE CLEARLY AND CONCISELY, BOTH ORALLY AND IN WRITING
ASSUME COMPLETE ENTERPRISE MANAGEMENT RESPONSIBILITIES ASSIGNED
COORDINATE THE WORK OF LOWER LEVEL STAFF
CREATE CUSTOM SOFTWARE USING CURRENT PROGRAMMING LANGUAGES
BENCHMARK, EVALUATE AND MAKE RECOMMENDATIONS FOR THE SELECTION OF STORAGE
MANAGEMENT SOFTWARE AND HARDWARE

WORKING CONDITIONS

OFFICE ENVIRONMENT; EXPOSURE TO COMPUTER SCREENS.

PHYSICAL REQUIREMENTS

MAINTAIN PHYSICAL CONDITION APPROPRIATE TO THE PERFORMANCE OF ASSIGNED DUTIES AND RESPONSIBILITIES SUCH AS: SITTING, STANDING FOR PROLONGED PERIODS OF TIME AND EXTENSIVE USE OF COMPUTER KEYBOARD
MAINTAIN EFFECTIVE AUDIO-VISUAL DISCRIMINATION AND PERCEPTION NEEDED FOR MAKING OBSERVATIONS, COMMUNICATING WITH OTHERS, READING, WRITING AND OPERATING ASSIGNED EQUIPMENT