

Water Authority Position Description

DATABASE ADMINISTRATOR I

Status	Position Code	Level	Date
APPROVED	DBA1	I28	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.

MIN EDUCATION & EXPERIENCE REQ

BACHELOR'S DEGREE FROM AN ACCREDITED COLLEGE OR UNIVERSITY WITH MAJOR COURSE WORK IN INFORMATION SYSTEMS, COMPUTER SCIENCE OR A RELATED FIELD, PLUS EIGHT (8) YEARS OF DATABASE ADMINISTRATION OR COMPUTER PROGRAMMING EXPERIENCE. ORACLE EXPERIENCE PREFERRED.

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 HIGHER LEVEL SUPERVISORY OR MANAGEMENT STAFF.

PROVIDE GENERAL DIRECTION TO CONTRACTORS.

MAY ASSUME MAJOR PROJECT MANAGEMENT RESPONSIBILITIES.

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. DEVELOP WATER AUTHORITY-WIDE STANDARDS AND PREFERRED METHODOLOGIES FOR USE OF THE WATER AUTHORITY'S DATABASE MANAGEMENT SYSTEM ENVIRONMENT AND ASSOCIATED APPLICATION DEVELOPMENT.
4. INSTALL AND MAINTAIN SOFTWARE FOR STANDARD DATABASE MANAGEMENT SYSTEMS AND DATA ADMINISTRATION SUPPORT. FOLLOW ESTABLISHED 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 ENTERPRISE-LEVEL DATA MODEL IN A CENTRAL REPOSITORY.
7. DEVELOP 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. MAINTAIN DEVELOPMENT, TEST, AND PRODUCTION RDBMS ENVIRONMENTS.
11. MONITOR AND MAINTAIN DATABASE SECURITY AND DATABASE SOFTWARE, IN COOPERATION WITH DATA SECURITY ADMINISTRATORS.
12. PROVIDE ADVICE TO APPLICATIONS PROGRAMMERS IN THE EFFECTIVE USE OF DATABASE LANGUAGES. ADVISE ON TROUBLESHOOTING, EXCEPTION PROCESSING NEEDS, AND OTHER DATA MANAGEMENT ISSUES.
13. 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.
14. MAY EVALUATE AND RECOMMEND TESTING AND EVALUATION OF NEW PROCEDURES, SOFTWARE, AND HARDWARE.
15. MONITOR AND MANAGE DATABASE BACKUPS, LOGS, AND JOURNALS. INSTALL, MAINTAIN, AND UPGRADE DATABASE SOFTWARE. RESTORE AND/OR RECOVER DATA AS NEEDED.

16. CREATES, PROCURES AND MAINTAINS VARIOUS DATABASE RELATED DOCUMENTS SUCH AS MANUALS AND PROGRAMMERS HANDBOOKS.

17. MAINTAINS CURRENCY OF KNOWLEDGE WITH RESPECT TO RELEVANT STATE-OF-THE-ART TECHNOLOGY, EQUIPMENT, AND/OR SYSTEMS.

18. PROCURE AND MAINTAIN UP-TO-DATE, LEGAL SOFTWARE LICENSES FOR DATABASE SERVERS, CLIENTS AND END USER AND DEVELOPER TOOLS.

SUPPLEMENTAL FUNCTIONS

1. ATTEND AND PARTICIPATE IN PROFESSIONAL GROUP MEETINGS. STAY ABREAST OF NEW TRENDS AND INNOVATIONS IN THE FIELD OF INFORMATION SYSTEMS.

2. WILL BE REQUIRED TO PROVIDE 24X7 ON-CALL SUPPORT.

3. PERFORM RELATED DUTIES AND RESPONSIBILITIES AS REQUIRED.

4. REGISTER, MANAGE AND SOLVE SERVICE REQUESTS WITH DATABASE AND SOFTWARE VENDORS.

PREFERRED KNOWLEDGE

ADVANCED PRINCIPLES AND PRACTICES OF DATABASE ADMINISTRATION
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 CLIENT/SERVER ENVIRONMENTS
ADVANCED METHODS AND TECHNIQUES OF DATABASE DESIGN AND ADMINISTRATION
ORACLE AND SQLSERVER DATABASE TOOLS, ENVIRONMENTS AND QUERY LANGUAGES
(SQL, TS QL)

PREFERRED SKILL/ABILITY

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
ESTABLISH AND MAINTAIN EFFECTIVE WORKING RELATIONSHIPS WITH THOSE
CONTACTED IN THE COURSE OF WORK

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.