

# Water Authority Position Description

## SYSTEMS ADMINISTRATOR III

Status	Position Code	Level	Date
APPROVED	SAD3	I29	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

SYSTEMS ADMINISTRATOR 3 IS THE ADVANCED LEVEL WITHIN THE SYSTEMS ADMINISTRATOR JOB SERIES. PROVIDE COMPLEX AND DIFFICULT TECHNICAL ASSISTANCE AND SUPPORT FOR STRATEGIC, INTER-DIVISIONAL WATER AUTHORITY COMPUTER OPERATING SYSTEMS AND RELATED SYSTEM SOFTWARE AND HARDWARE COMPONENTS. PERFORM A VARIETY OF COMPLEX SYSTEMS ANALYSIS DUTIES IN THE INSTALLATION, TESTING, MAINTENANCE AND SUPPORT OF CENTRAL COMPUTER OPERATING SYSTEMS HARDWARE AND SOFTWARE.

### MIN EDUCATION & EXPERIENCE REQ

BACHELOR'S DEGREE FROM AN ACCREDITED COLLEGE OR UNIVERSITY IN INFORMATION SYSTEMS, COMPUTER SCIENCE OR A RELATED FIELD, PLUS EIGHT (8) YEARS OF LARGE SYSTEMS (I.E., SERVER BASED) SYSTEMS PROGRAMMING, ADMINISTRATION, DESIGN, IMPLEMENTATION AND PROJECT MANAGEMENT EXPERIENCE, AND PROJECT TECHNICAL LEAD EXPERIENCE WORKING ON SYSTEMS PROJECTS, TO INCLUDE TWO (2) YEARS EXPERIENCE AS A TECHNICAL LEAD ON COMPLEX TECHNICAL PROJECTS.

### ADDITIONAL REQUIREMENTS

ACTIVE DIRECTORY CERTIFICATION PREFERRED  
 POSSESSION OF, OR ABILITY TO OBTAIN AND MAINTAIN A VALID AUTHORITY OPERATOR PERMIT (AOP)  
 A+ CERTIFICATION PREFERRED  
 MCSA CERTIFICATION PREFERRED  
 MCSE CERTIFICATION PREFERRED  
 NET+ CERTIFICATION PREFERRED  
 POSSESSION OF A VALID NEW MEXICO DRIVER'S LICENSE.  
 SECURITY+ CERTIFICATION PREFERRED

### SUPERVISION RECEIVED/EXERCISED

RECEIVES ADMINISTRATIVE GENERAL DIRECTION FROM HIGHER LEVEL SUPERVISORY OR MANAGEMENT STAFF.  
MAY EXERCISE FUNCTIONAL AND TECHNICAL SUPERVISION OVER LOWER LEVEL INFORMATION SYSTEMS STAFF, COORDINATE ACTIVITIES, AND/OR PROVIDE TECHNICAL GUIDANCE TO THE APPLICATIONS DEVELOPMENT STAFF.  
MAY SERVE AS PRIMARY PROJECT TECHNICAL LEAD.

### **ESSENTIAL FUNCTIONS**

1. PROVIDE LEAD TECHNICAL ASSISTANCE AND SUPPORT FOR STRATEGIC WATER AUTHORITY COMPUTER SYSTEMS/SERVERS AND RELATED SYSTEM SOFTWARE AND HARDWARE COMPONENTS.
2. PERFORM A VARIETY OF COMPLEX SYSTEMS ANALYSIS AND PROGRAMMING DUTIES IN THE DESIGN, DEVELOPMENT, IMPLEMENTATION AND MAINTENANCE OF INFORMATION SYSTEMS AND SUPPORTING COMPUTER HARDWARE AND SOFTWARE.
3. EVALUATE, INSTALL, TEST, AND IMPLEMENT NEW CENTRAL HARDWARE, OPERATING SYSTEMS OR SYSTEMS SOFTWARE PACKAGES. INSTALL NEW VERSIONS, RELEASES OR MAINTENANCE LEVELS OF EXISTING OPERATING SYSTEMS AND RELATED COMPONENTS.
4. DETECT, ISOLATE AND RESOLVE COMPUTER SYSTEM PROBLEMS UTILIZING VENDOR COORDINATION AND SUPPORT AS NEEDED AND IMPLEMENT APPROPRIATE BYPASSES OR OTHER RESOLUTIONS.
5. PARTICIPATE IN SYSTEM ADMINISTRATION ACTIVITIES INCLUDING SETTING UP AND MONITORING BACKUP PROCESSES, ADDING NEW USERS, MODIFYING USER/GROUP PROFILES, MONITORING AND TUNING SYSTEM/SERVER RESOURCES.
6. STUDY EXISTING INFORMATION PROCESSING SYSTEMS TO EVALUATE EFFECTIVENESS AND DEVELOP SPECIFICATIONS FOR NEW SYSTEMS OR PROTOTYPE SYSTEMS TO IMPROVE PRODUCTION OR WORKFLOW AS REQUIRED.
7. PREPARE WORKFLOW CHARTS AND DIAGRAMS USING AUTOMATED TOOLS TO SPECIFY IN DETAIL OPERATIONS TO BE PERFORMED BY EQUIPMENT AND COMPUTER PROGRAMS AND OPERATIONS TO BE PERFORMED BY PERSONNEL IN SYSTEM.
8. CONDUCT STUDIES PERTAINING TO DEVELOPMENT OF NEW COMPLEX INFORMATION SYSTEMS TO MEET CURRENT AND PROJECTED NEEDS.
9. PLAN AND PREPARE TECHNICAL REPORTS, MEMORANDA, AND INSTRUCTIONAL MANUALS AS DOCUMENTATION OF PROGRAM DEVELOPMENT FOLLOWING WATER AUTHORITY AND INFORMATION TECHNOLOGY DOCUMENTATION STANDARDS.
10. COORDINATE AND CONDUCT USER TRAINING, EDUCATION AND PROBLEM SOLVING SESSIONS; COUNSEL USERS REGARDING SYSTEM FUNCTIONALITY.

11. UPGRADE SYSTEM AND CORRECT COMPLEX ERRORS TO MAINTAIN SYSTEM AFTER IMPLEMENTATION. DIRECT AND COORDINATE WORK OF OTHERS TO DEVELOP, TEST, INSTALL, AND MODIFY PROGRAMS. TROUBLESHOOT COMPLEX PROBLEMS TO SOURCE. ASSIST OTHER ANALYSTS IN RESOLVING COMPLEX WORK PROBLEMS RELATED TO FLOW CHARTS, PROJECT SPECIFICATIONS, OR PROGRAMMING.

12. PREPARE TIME AND COST ESTIMATES FOR COMPLETING PROJECTS. PREPARE GANTT AND PERT CHARTS USING AUTOMATED PROJECT MANAGEMENT TOOLS.

13. DEVELOP REQUESTS FOR PROPOSALS (RFP)S. NEGOTIATE AND MANAGE VENDOR CONTRACTS FOR INFORMATION TECHNOLOGY SERVICES. MAINTAIN RELATIONSHIPS WITH VENDORS.

14. PREPARE AND PRESENT PROJECT PROGRESS REPORTS FOR DIVISION MANAGEMENT OR COMMITTEES. IDENTIFY PROBLEMS AND ISSUES. RECOMMEND SOLUTIONS.

15. REVIEW PROPOSED SYSTEMS SOFTWARE FOR COMPLIANCE WITH APPLICABLE QUALITY ASSURANCE STANDARDS BEFORE ACQUISITION OR IMPLEMENTATION.

16. MANAGE THE RELATIONSHIP AND EXPECTATIONS OF USER PERSONNEL AND DIVISIONS INCLUDING THE PREPARATION OF SERVICE AGREEMENTS.

17. PROVIDE STRATEGIC PLANNING DIRECTION AND TECHNICAL ASSISTANCE FOR USER INFORMATION TECHNOLOGY PLANS.

18. PROVIDE TECHNICAL DIRECTION AND TRAINING TO MEMBERS OF THE SYSTEMS DEVELOPMENT STAFF AND OTHER TECHNICAL STAFF.

19. 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.

20. DEVELOP AND/OR IMPLEMENT CHANGE CONTROL PLANS FOR BOTH PRODUCTION AND SECONDARY SYSTEMS.

21. WORK CLOSELY WITH BOTH APPLICATIONS AND DATABASE GROUPS TO ENSURE CURRENT AND FUTURE OPERATION HEALTH OF SYSTEMS.

22. PREPARE PRESENTATION MATERIALS FOR TECHNICAL CONFERENCES AND VENDORS

23. ASSIST WITH COMPUTER ROOM ENVIRONMENT, INCLUDING: POWER DISTRIBUTION, BATTERY BACKUP (UPS), TEMPERATURE CONTROL AND BACKUP GENERATOR POWER.

### **SUPPLEMENTAL FUNCTIONS**

1. ATTEND AND PARTICIPATE IN PROFESSIONAL GROUP MEETINGS. STAY ABREAST OF NEW TRENDS AND INNOVATIONS IN THE FIELD OF INFORMATION SYSTEMS.
2. MAY BE REQUIRED TO PROVIDE 24X7 ON-CALL SUPPORT.
3. CROSS TRAIN IN OTHER AREAS TO GAIN A BETTER UNDERSTANDING OF THE TECHNICAL FUNCTIONS PERFORMED.
4. PERFORM RELATED DUTIES AND RESPONSIBILITIES AS REQUIRED.
5. PERFORM COMPLEX TECHNICAL, MANAGEMENT OR ADMINISTRATIVE TASKS REPORTING DIRECTLY TO THE SYSTEMS MANAGER OR CHIEF INFORMATION OFFICER, AS NEEDED.

### **PREFERRED KNOWLEDGE**

COMPLEX THEORIES AND APPLICATIONS OF COMPUTER SCIENCE  
 ADVANCED PRINCIPLES AND PRACTICES OF SYSTEM SOFTWARE INSTALLATION AND SUPPORT  
 PRINCIPLES AND PRACTICES OF PROJECT MANAGEMENT METHODOLOGIES  
 PRINCIPLES OF PROJECT LEAD AND TRAINING  
 METHODS AND TECHNIQUES USED IN THE INSTALLATION, ADMINISTRATION, MONITORING, UPGRADING AND PROBLEM RESOLUTION OF LARGE AND COMPLEX CENTRAL COMPUTER SYSTEMS/SERVERS  
 SYSTEM DEVELOPMENT LIFE CYCLE PHASES, ACTIVITIES AND IMPLICATIONS  
 OPERATIONAL CHARACTERISTICS OF OPERATING SYSTEMS AND RELATED COMPONENTS  
 BASIC BUDGETING, CONTRACTING, PURCHASING PRACTICES, PROJECT MANAGEMENT METHODOLOGIES, POLICIES AND PROCEDURES  
 PRINCIPLES AND PROCEDURES OF QUALITY ASSURANCE AND SECURITY RELATED TO COMPLEX, LARGE COMPUTER APPLICATIONS  
 GATHERING BUSINESS REQUIREMENTS TO ACHIEVE BUSINESS OBJECTIVES  
 DEVELOPMENT AND SUPPORT OF PRIMARY, SECONDARY, DOWNTOWN AND SURFACE WATER SURFACE LOCATION  
 KNOWLEDGE AND EXPERIENCE IN WINDOWS SERVER 2003, STANDARD AND ENTERPRISE, 32 AND 64 BIT SYSTEMS, WINDOWS SERVER 2008, STANDARD, ENTERPRISE AND DATACENTER, 32 AND 64 BIT SYSTEMS,  
  
 NOVELL NETWARE 6.5, SUN SOLARIS 9 AND 10, DATAONTAP, EMC LEGATO NETWORKER, SUN ILOM, IBM SERVER GUIDE, CISCO WAAS MOBILE.  
 ABILITY TO UNDERSTAND AND CONFIGURE ALL RAID LEVELS.  
 BASIC UNDERSTANDING OF DATA STORAGE INCLUDING SAN, NAS, VOLUME, LUN AND CLOUD  
 KNOWLEDGE AND EXPERIENCE USING MICROSOFT HYPER-V  
 ABILITY TO CREATE VIRTUAL SERVERS IN BOTH A UNIX AND WINDOWS ENVIRONMENT  
 METHODS AND TECHNIQUES USE IN ADMINISTERING A VIRTUAL SERVER AND PC ENVIRONMENT  
 KNOWLEDGE AND EXPERIENCE ADMINISTERING A MICROSOFT ACTIVE DIRECTORY (AD) INFRASTRUCTURE  
 CREATING AND MAINTAINING MICROSOFT ACTIVE DIRECTORY POLICIES FOR BOTH GROUPS AND INDIVIDUALS  
 KNOWLEDGE OF MICROSOFT SYSTEM CENTER MANAGEMENT SUITE

### **PREFERRED SKILL/ABILITY**

PERFORM HIGHLY ADVANCED SYSTEM PROGRAMMING DUTIES  
ASSUME MAJOR PROJECT MANAGEMENT RESPONSIBILITIES ASSIGNED  
ESTABLISH AND MAINTAIN EFFECTIVE WORKING RELATIONSHIPS WITH THOSE  
CONTACTED IN THE COURSE OF WORK  
COORDINATE THE WORK OF LOWER LEVEL STAFF  
INSTALL, TROUBLESHOOT AND UPGRADE CENTRAL COMPUTING SYSTEMS/SERVERS  
EVALUATE, TEST, IMPLEMENT AND SUPPORT OPERATING SYSTEMS MAJOR SYSTEM  
COMPONENTS  
DEVELOP STANDARDS AND METHODOLOGIES FOR THE ADMINISTRATION OF  
AUTHORITY'S CENTRAL COMPUTER SYSTEMS/SERVERS  
COMMUNICATE CLEARLY AND CONCISELY, BOTH ORALLY AND IN WRITING  
PRINCIPLES AND PRACTICES OF PROJECT MANAGEMENT METHODOLOGIES  
PRINCIPLES OF PROJECT LEAD AND TRAINING  
UTILIZE AUTOMATED PROJECT MANAGEMENT TOOLS  
WORK INDEPENDENTLY IN THE ABSENCE OF SUPERVISION

### **WORKING CONDITIONS**

OFFICE AND COMPUTER ROOM 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