

Water Authority Position Description

SYSTEMS ANALYST II

Status	Position Code	Level	Date
APPROVED	SAN2	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

SYSTEMS ANALYST 2 IS A FULL JOURNEY LEVEL CLASS IN THE SYSTEMS ANALYST SERIES. ANALYZE USER REQUIREMENTS, PROCEDURES, AND PROBLEMS TO AUTOMATE BUSINESS PROCESSES OR IMPROVE EXISTING COMPUTER SYSTEMS INCLUDING VERY COMPLEX SYSTEMS IN A SHARED ENVIRONMENT OR WITH EXTENSIVE MULTIPLE CLIENT INTERACTION.

MIN EDUCATION & EXPERIENCE REQ

BACHELOR'S DEGREE FROM AN ACCREDITED COLLEGE OR UNIVERSITY IN INFORMATION SYSTEMS, COMPUTER SCIENCE OR A RELATED FIELD, PLUS SIX (6) YEARS OF SOFTWARE APPLICATIONS ANALYSIS, DESIGN, PROGRAMMING AND IMPLEMENTATION AND PROJECT MANAGEMENT EXPERIENCE.

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

RECEIVES GENERAL DIRECTION FROM HIGHER LEVEL SUPERVISORY OR MANAGEMENT STAFF.

MAY EXERCISE FUNCTIONAL AND TECHNICAL SUPERVISION OVER SUPPORT INFORMATION SYSTEMS STAFF.

MAY SERVE AS PROJECT TECHNICAL LEAD.

ESSENTIAL FUNCTIONS

1. SERVE AS LEAD OVER ALL ASPECTS OF ASSIGNED APPLICATIONS DEVELOPMENT AND SOFTWARE IMPLEMENTATION PROJECTS. EVALUATE AND ASSESS CLIENT NEEDS. IDENTIFY AND ALLOCATE RESOURCES INCLUDING STAFF, EQUIPMENT AND MATERIALS. SET TASK PRIORITIES.
2. CONFER WITH PERSONNEL OF ORGANIZATIONAL UNITS INVOLVED TO ANALYZE CURRENT OPERATIONAL PROCEDURES, IDENTIFY PROBLEMS, AND LEARN SPECIFIC INPUT AND OUTPUT REQUIREMENTS SUCH AS FORMS OF DATA INPUT, HOW DATA IS TO BE SUMMARIZED AND FORMATS FOR REPORTS.
3. WRITE DETAILED DESCRIPTION OF USER NEEDS, PROGRAM FUNCTIONS AND STEPS REQUIRED TO DEVELOP OR MODIFY COMPUTER PROGRAM, AND APPLICATION SPECIFICATIONS INCLUDING DATABASE INTERFACES, USER INTERFACES, BUSINESS RULES, AND DATABASE RELATIONSHIPS.
4. REVIEW COMPUTER SYSTEM CAPABILITIES, WORKFLOW, AND SCHEDULING LIMITATIONS TO DETERMINE IF REQUESTED PROGRAM OR PROGRAM CHANGE IS POSSIBLE WITHIN EXISTING SYSTEM.
5. STUDY EXISTING INFORMATION PROCESSING SYSTEMS TO EVALUATE EFFECTIVENESS AND DEVELOP SPECIFICATIONS FOR NEW SYSTEMS OR PROTOTYPE SYSTEMS TO IMPROVE PRODUCTION OR WORKFLOW AS REQUIRED.
6. PREPARE WORKFLOW CHARTS AND DIAGRAMS TO SPECIFY IN DETAIL OPERATIONS TO BE PERFORMED BY EQUIPMENT AND COMPUTER PROGRAMS AND OPERATIONS TO BE PERFORMED BY PERSONNEL IN SYSTEM.
7. CONDUCT STUDIES PERTAINING TO DEVELOPMENT OF NEW INFORMATION SYSTEMS TO MEET CURRENT AND PROJECTED NEEDS.
8. PLAN AND PREPARE TECHNICAL REPORTS, MEMORANDA, AND INSTRUCTIONAL MANUALS AS DOCUMENTATION OF PROGRAM DEVELOPMENT.
9. DESIGN AND DEVELOP TRAINING PROCEDURES AND PLANS INCLUDING ONLINE TRAINING OPTIONS. COORDINATE AND CONDUCT USER TRAINING, EDUCATION AND PROBLEM SOLVING SESSIONS. COUNSEL USERS REGARDING SYSTEM FUNCTIONALITY.
10. UPGRADE SYSTEM AND CORRECT ERRORS TO MAINTAIN SYSTEM AFTER IMPLEMENTATION. DIRECT AND COORDINATE WORK OF OTHERS TO DEVELOP TEST INSTALL AND MODIFY PROGRAMS. TROUBLESHOOT PROBLEMS TO SOURCE. ASSIST PROGRAMMER ANALYSTS IN RESOLUTION OF WORK PROBLEMS RELATED TO FLOW CHARTS, PROJECT SPECIFICATIONS, OR PROGRAMMING.

11. PREPARE TIME AND COST ESTIMATES FOR COMPLETING PROJECTS.
12. DEVELOP REQUEST FOR PROPOSALS (RFP)S. NEGOTIATE AND MANAGE VENDOR CONTRACT FOR INFORMATION TECHNOLOGY SERVICES.
13. PREPARE AND PRESENT PROJECT PROGRESS REPORTS FOR DIVISION MANAGEMENT OR COMMITTEE. IDENTIFY PROBLEMS AND ISSUES. RECOMMEND SOLUTIONS.
14. REVIEW PROPOSED APPLICATION SOFTWARE FOR COMPLIANCE WITH APPLICABLE QUALITY ASSURANCE STANDARDS BEFORE ACQUISITION OR IMPLEMENTATION.
15. MANAGE THE RELATIONSHIP AND EXPECTATIONS OF USER PERSONNEL AND DIVISIONS INCLUDING THE PREPARATION OF SERVICE AGREEMENTS.
16. PROVIDE STRATEGIC PLANNING DIRECTION AND TECHNICAL ASSISTANCE FOR USER INFORMATION TECHNOLOGY PLANS.
17. ENSURE THAT QUALITY METHODS AND PROCEDURES ARE EXECUTED. ENSURES THAT PRODUCTS, APPLICATIONS, AND SYSTEMS ARE IN COMPLIANCE WITH ESTABLISHED QUALITY STANDARDS AND MEET CUSTOMER REQUIREMENTS. ANALYZES BEST-IN-CLASS PROCESSES, UNDERSTANDS THE INTERACTION AND RELATIONSHIP OF BUSINESS OPERATIONS AND OPERATING SYSTEMS AND NETWORK PROCESSES.
18. PERFORM DEVELOPMENT TASKS, TO INCLUDE REQUIREMENTS ANALYSIS, SYSTEMS ANALYSIS, DESIGN, APPLICATION DEVELOPMENT AND TESTING, SYSTEM IMPLEMENTATION AND DEVELOPMENT OF SYSTEM DOCUMENTATION FOR MULTI-DIVISION SYSTEMS. DESIGN, DEVELOP, TEST AND IMPLEMENT SYSTEM INTERFACES. DEVELOPMENT TAKS TO INCLUDE USING PROGRAMMING LANGUAGES AND TOOLS SUCH AS: XHTML, SML, VB.NET, C#.NET, ASP.NET, JAVASCRIPT, PYTHON, ESRI ARCGIS 9.3, ARCOBJECTS 9.3, ARCCATALOG 9.3, ARCMAP 9.3, WEB ADF, AND MODEL BUILDER, VISUAL STUDIO 2008 OR HIGHER, .NET FRAMEWORK 2.0 OR ABOVE, WINDOW XP OR HIGHER, ORACLE SQL, MS ACCESS, EXCEL, AND WORD, MS PROJECT, ESRI GEOFILE DATABASES, PUTTY, ARCGIS API FOR SILVERLIGHT/WPF 1.3 OR HIGHER, TOAD, MS SQL SERVER, ORACLE 11G OR HIGHER, MS REPORTING SERVICES, ARCSDE 9.3 OR HIGHER, GLOBAL ASSEMBLY CACHE, SHAREPOINT, .NET FORMS AUTHENTICATION, WORKING WITH AND IMAGING/SCANNING SOFTWARE AND LIBRARIES, UNIX, JAVA, COBOL, SQL DEVELOPER, DB ARTISAN APPLICATIONS INCLUDING ORACLE'S CUSTOMER CARE & BILLING, MAXIMO, MAXGIS, MAXWEB, COGNOS, KRONOS, UC4 SCHEDULING SOFTWARE, WEBLOGIC, WEBSPIHERE, GIS, TELDIG ONECALL SYSTEM.
19. PROVIDE TECHNICAL DIRECTION AND TRAINING TO MEMBERS OF THE SYSTEMS DEVELOPMENT STAFF AND OTHER TECHNICAL STAFF.
20. PARTICIPATE IN THE EMPLOYEE INTERVIEW/SELECTION PROCESS. TRAIN, EVALUATE AND COMMUNICATE WITH ASSIGNED STAFF. PROVIDE OR COORDINATE TRAINING. WORK WITH EMPLOYEES TO CORRECT DEFICIENCIES.
21. DEVELOP AND/OR IMPLEMENT CHANGE CONTROL PLANS FOR PRODUCTION SYSTEMS.
22. WORK CLOSELY WITH DATABASE ADMINISTRATOR TO ENSURE CURRENT AND FUTURE OPERATIONAL HEALTH OF DATABASES.

SUPPLEMENTAL FUNCTIONS

1. ATTEND AND PARTICIPATE IN PROFESSIONAL GROUP MEETINGS. STAY ABREAST OF NEW TRENDS AND INNOVATIONS IN THE FIELD OF INFORMATION SERVICES.
2. PERFORM RELATED DUTIES AND RESPONSIBILITIES AS REQUIRED.
3. MAY REQUIRE 24 X 7 ON CALL AVAILABILITY.
4. PERFORM COMPLEX, TECHNICAL, MANAGEMENT OR ADMINISTRATIVE TASKS REPORTING TO THE APPLICATIONS MANAGER, AS NEEDED.

PREFERRED KNOWLEDGE

COMPLEX THEORIES AND APPLICATIONS OF COMPUTER SCIENCE
METHODS AND TECHNIQUES OF APPLICATION DEVELOPMENT, SYSTEM DESIGN,
PROGRAMMING, INSTALLATION, TROUBLE SHOOTING AND MAINTENANCE OF SOFTWARE
APPLICATIONS

PERSONAL COMPUTER HARDWARE AND SOFTWARE COMPONENTS

SYSTEM DEVELOPMENT LIFE CYCLE PHASES, ACTIVITIES AND IMPLICATIONS

BASIC BUDGETING, CONTRACTING, PURCHASING PRACTICES, PROJECT MANAGEMENT
METHODOLOGIES, POLICIES AND PROCEDURES

ADVANCED PROGRAMMING TECHNIQUES INCLUDING COMPLEX, LARGE INTEGRATED
DATABASE MANAGEMENT APPLICATIONS

OPERATIONAL CHARACTERISTICS AND CAPABILITIES OF COMPLEX DATA BASE
MANAGEMENT SYSTEMS

PRINCIPLES AND PROCEDURES OF QUALITY ASSURANCE AND SECURITY RELATED TO
COMPLEX, LARGE COMPUTER APPLICATIONS

GATHERING BUSINESS REQUIREMENTS AND TRANSLATING THEM INTO INTERNET/WEB
ARCHITECTURE TO ACHIEVE BUSINESS OBJECTIONS

DEVELOPMENT AND SUPPORT OF ALL INTERNET/INTRANET/EXTRANET SITES AND
SUPPORTING SYSTEMS

DEMONSTRATED SKILLS IN GRAPHIC APPLICATIONS, HTML DEVELOPMENT TOOLS AND
OTHER APPLICABLE AUTHORING TOOLS

KNOWLEDGE AND EXPERIENCE IN HTML, INCLUDING STYLE SHEETS, TEMPLATES,
COMPLEX TABLES, FRAMES, IMAGE MAPS, CGI PROGRAMMING, APPLETS, ANIMATION,
MULTIMEDIA DESIGN AND DELIVERY AND WEB PUBLISHING PROCEDURES
DEVELOPMENT AND MANAGEMENT OF WEB SECURITY POLICIES AND PROCEDURES FOR
THE ENTERPRISE

DEVELOPMENT AND MAINTENANCE OF GEOSPATIAL DATABASES

ABILITY TO PERFORM SPATIAL ANALYSIS AND DATABASE DEVELOPMENT,
EXTRACTION AND MANIPULATION

KNOWLEDGE OF IMPORTING AND EXPORTING AUTOCAD DRAWINGS TO/FROM GIS SYSTEM

KNOWLEDGE OF HTML, XML, VB.NET, C#.NET, ASP.NET, JAVASCRIPT, PYTHON

KNOWLEDGE OF ESRI ARCGIS 9.3, ARCOBJECTS 9.3, ARCCATALOG 9.3, ARCMAP 9.3,
WEB ADF, AND MODEL BUILDER, VISUAL STUDIO 2008 OR HIGHER, .NET FRAMEWORK
2.0 OR ABOVE, WINDOW XP OR HIGHER

SQL EXPERIENCE DEVELOPING QUERIES, TABLES, FUNCTIONS AND STORED
PROCEDURES (SOME ORACLE EXPERIENCE PREFERRED)

KNOWLEDGE OF MS ACCESS, EXCEL, AND WORD, MS PROJECT, ESRI GEOFILE DATABASES, PUTTY, ARCGIS API FOR SILVERLIGHT/WPF 1.3 OR HIGHER, TOAD, MS SQL SERVER, ORACLE 11G OR HIGHER, MS REPORTING SERVICES, ARCSDE 9.3 OR HIGHER, GLOBAL ASSEMBLY CACHE, SHAREPOINT, .NET FORMS AUTHENTICATION, WORKING WITH AND IMAGING/SCANNING SOFTWARE AND LIBRARIES, UNIX, JAVA, COBOL, SQL DEVELOPER, DB ARTISAN APPLICATIONS INCLUDING ORACLE'S CUSTOMER CARE & BILLING, MAXIMO, MAXGIS, MAXWEB, COGNOS, KRONOS, UC4 SCHEDULING SOFTWARE, WEBLOGIC, WEBSHERE, GIS, TELDIG ONECALL SYSTEM

PREFERRED SKILL/ABILITY

RECOMMEND, DESIGN, IMPLEMENT, INSTALL AND MAINTAIN COMPLEX, LARGE COMPUTER SOFTWARE APPLICATIONS USED BY MULTIPLE WATER AUTHORITY DIVISIONS.
APPLY A WIDE VARIETY OF COMPUTER PROGRAMMING LANGUAGES
DEFINE COMPLEX PROBLEMS, COLLECT DATA, ESTABLISH FACTS, DRAW VALID CONCLUSIONS AND PREPARE APPROPRIATE REPORTS
DETECT, ISOLATE AND RESOLVE COMPLEX INFORMATION SYSTEM PROBLEMS
ANALYZE AND ASSESS THE TECHNOLOGICAL NEEDS OF MULTIPLE WATER AUTHORITY DIVISIONS
PROVIDE ADVANCED APPLICATION DEVELOPMENT PROJECT MANAGEMENT SERVICES
MANAGE CUSTOMER RELATIONS AND EXPECTATIONS
UTILIZE AUTOMATED PROJECT MANAGEMENT TOOLS
IMPLEMENT REVIEW QUALITY ASSURANCE AND SECURITY PROCEDURES FOR APPLICATIONS SERVICES
EFFECTIVELY PRESENT INFORMATION AND/OR RESPOND TO INQUIRIES/COMPLAINTS FROM AUTHORITY MANAGEMENT, REGULATORY AGENCIES OR THE PUBLIC
PERFORM HIGHLY ADVANCED PROGRAMMING DUTIES
PERFORM APPLICATION DESIGN FUNCTION FOR COMPLEX, MULTI-DIVISION SYSTEMS
WORK INDEPENDENTLY IN THE ABSENCE OF SUPERVISION
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. MAY BE REQUIRED TO VISIT OFF SITE CLIENT OFFICES.

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