~~APRIL 2019~~NOVEMBER 2022
FLSA: NON-EXEMPT
Bargaining Unit: PL
JCN: 3124/3125

INFORMATION TECHNOLOGY ANALYST I/II – SERVER DESIGN AND ADMINISTRATION

DEFINITION

Under general supervision or direction, performs a diverse range of professional, and analytical duties in the design, development, engineering, enhancement, administration, and maintenance of computer systems infrastructure to meet business needs~~County information technology servers and related systems~~, including server hardware and desktop~~core~~ infrastructure applications, maintaining third-party desktop software; analyzes customer and enterprise infrastructure client/server systems requirements; develops and maintains department and enterprise infrastructure client/server architectures; installs, modifies, and configures desktop hardware and peripherals; and performs related duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision or direction from assigned supervisory or management personnel. Exercises no direct supervision over staff but may lead the work of staff on assigned projects.

CLASS CHARACTERISTICS

Information Technology Analyst I – Server Design and Administration: This is the entry-level classification in the Information Technology Analyst – Server Design and Administration class series. Initially under general supervision, incumbents learn the operational aspects of the County's information technology architecture as well as its core hardware and desktop software platforms. As experience is gained, assignments become more varied, complex, and difficult, and the degree of supervision and frequent review of work lessens as an incumbent demonstrates skill to perform the work independently. Positions at this level usually perform most of the duties required of the positions at the II-level, but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise.

Information Technology Analyst II – Server Design and Administration: This is the fully qualified journey-level classification in the Information Technology Analyst – Server Design and Administration class series where incumbents perform the full range of server design, desktop support analysis, engineering, enhancement, administration, and maintenance. Positions at this level are distinguished from the I-level by the performance of the full range of duties, working independently, and exercising judgment and initiative. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit.

This class is further distinguished from the Information Technology Analyst III– Server Design and Administration in that the latter is responsible for more complex and higher-level analysis, server design, and administration functions and provides lead oversight to assigned staff.

Positions in the Information Technology Analyst - Server Design and Administration class series are flexibly staffed and positions at the II-level are normally filled by advancement from the I-level after gaining the knowledge, skill, and experience which meets the qualifications for the II-level, and after demonstrating the ability to perform the work of the higher-level class.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

- Performs a diverse range of professional, analytical duties in the design, engineering, enhancement, administration, and maintenance of County information technology servers and related systems, including server hardware and ~~core~~ infrastructure applications.
- Provides professional customer support for system-related software and/or hardware issues, needs, or requirements. Interacts with clients to analyze system requirements; recommends technology solutions to improve operations.
- Determines needs and develops/designs plans and proposals to meet the needs of department or enterprise infrastructure client/server users.
- Plans, determines requirements, builds, tests, implements, maintains, and enhances department or enterprise desktop computer systems.
- Coordinates and collaborates with counterparts in other classifications to integrate desktop computer systems for operability over multiple platforms and technologies.
- Researches to determine feasibility and advises and recommends the appropriate uses of department or enterprise infrastructure client/server technology.
- Plans and determines system requirements; designs, builds, tests, implements, maintains, and enhances complex department or enterprise infrastructure client/server systems over multiple platforms, and technologies, ensuring that the design incorporates comprehensive security measures.
- Determines proper installation parameters for client/server software/hardware and other infrastructure systems for smooth integration, transition, and efficiency.
- Installs third-party department or enterprise infrastructure client/server software; modifies software as necessary to meet County requirements; installs vendor supplied maintenance and enhancements.
- Participates in the configuration, implementation, and troubleshooting of server platforms and software and coordinates/collaborates with other information technology staff in the integration of infrastructure ~~client/server~~ systems for operability.
- Acts as liaison between vendors, technical support, and departments to resolve ~~client/server system~~infrastructure impairments; coordinates and implements corrective measures.
- Models changes to desktop systems, hardware, and software configurations to optimize the utilization of resources using industry-standard scripting and deployment tools.
- Develops and implements comprehensive test plans to ensure that department or enterprise infrastructure client/server/desktop system technology components are tested and debugged.
- Monitors, tests, and collects data on department or enterprise infrastructure client/server/desktop system performance.
- Deploys and maintains County-owned mobile device solutions in the enterprise environment.
- Monitors and enforces security policies and procedures; plans, develops; implements backup and recovery procedures; ~~and crease~~ and documents procedures on newly developed infrastructures.
- Determines and adjusts thresholds for client/server system resources.
- Writes and maintains comprehensive technical documentation for assigned projects, including work flow diagrams, system design specifications, and policies and procedures for ~~the utilization of~~utilizing specific hardware and/or software.
- Provides training for County staff as assigned.
- Participates in projects related to assigned specialty field; may function as a leader of a small project team; may provide limited leadership, ~~training, and~~training, and mentoring to other Information Technologies staff regarding areas of expertise.
- May provide data for justification of unit budget in relation to work assignments.
- Conducts research and stays current on new trends and innovative solutions for software solutions to business processes; recommends new technologies which would improve the department's or client's operational effectiveness.
- Performs related duties as assigned.

QUALIFICATIONS

Some knowledge and abilities may be gained by employees at the entry (I) level while in a learning capacity.

Knowledge of:

- General operations, services, terms, and activities common to a comprehensive and modern information systems program.
- Principles and techniques of client/server architectures and methodologies.
- Design, ~~installation, and maintenance of~~install, and maintain department or enterprise infrastructure client/server systems, including operating system resource requirements.
- Methods and techniques of analyzing business processes and developing solutions.
- Principles and functions of core server platforms and operating systems, including Active Directory, System Center Configuration Manager, and related technologies.
- Hypervisor/virtualization concepts and administration.
- Network services and protocols such as TCP/IP v4 and v6 protocols, and DHCP, DNS, SNMP, SMTP, FTP, HTTP, HTTPS, and ICMP.
- Planning and implementation of client/server hardware/software installation/upgrades.
- Development of utility programs and shell scripts.
- Managing and monitoring server performance and ~~the use of~~using server diagnostic systems and tools.
- Methods of deploying and administering department or enterprise infrastructure systems and client/server applications.
- Enterprise backup administration, including pool creation and tape management.
- Networking services and protocols.
- Principles and practices of technical ~~problem solving~~problem-solving.
- Methods and techniques of evaluating technology products for potential modification to meet business specifications.
- Methods and techniques of designing and coordinating information technology testing processes.
- Industry best practices of data center virtualization, management, and control.
- Restart and recovery concepts.
- Methods and techniques of conducting research.
- Principles and techniques of leadership and working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.
- Methods and techniques of developing and delivering training.
- Principles and practices of producing effective project and technical documentation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and County staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination.
- Computers and software programs (e.g., Microsoft software packages) to conduct, compile, and/or generate documentation.

Ability to:

- Recognize problems; gather, analyze and evaluate data and information to reason logically; draw valid conclusions; take appropriate actions and/or make appropriate recommendations~~Recognize server problems, develop recommendations and solutions, and manage corrections.~~
- Integrate department and/or enterprise infrastructure client/server systems.
- Research, recommend, design, implement and maintain various hardware technology solutions, including new technology and large security infrastructure improvement projects, to improve County processes or services
- Administer and maintain centralized directory, file, and print services.

- Manage client/server user permissions and accounts.
- Enforce server security policies and procedures ~~through the use of~~using account, directory, and file rights filters.
- Develop and implement testing models.
- Evaluate, install, test, and implement new servers and server operating systems.
- Install new versions, releases, or maintenance levels of existing server operating systems and related components through a centralized resource.
- Coordinate activities with vendors, clients, and staff.
- Collaborate with colleagues in developing and documenting process ~~work flows~~workflows, applications specifications, and models.
- Make technical oral presentations to technical and non-technical audiences.
- Understand complex information technology systems and issues.
- Use sound independent judgment within established guidelines.
- Prepare clear and concise reports, correspondence, documentation, and other written material.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted ~~in the course of~~during work.

Education and Experience:
A combination of the required experience, education, and training that would provide the essential knowledge, skills, and abilities is qualifying; however, education may not solely substitute for the required experience.

Information Technology Analyst I – Server Design and Administration:

Equivalent ~~to~~ a bachelor's degree from an accredited four-year college or university with major coursework in information technology, computer science, or a closely related field. Possession of one or more approved nationally recognized industry specificindustry-specific technology certifications may be substituted for some or all ofall the education;.

OR

Four (4) years of professional experience providing desktop computing administration, or support within an enterprise environment, operating systems analysis/design, data network analysis and design, systems analysis and design, or systems engineering or similar field in a multi-platform information systems environment.

Information Technology Analyst II – Server Design and Administration:

Equivalent to a bachelor's degree from an accredited four-year college or university with major coursework in information technology, computer science, or a closely related field; possession of one or more approved nationally recognized industry specificindustry-specific technology certifications may be substituted for some or all of the education; and

EITHER

Three (3) years of professional experience providing analytical support for enterprise or departmental servers and platforms;

OR

Two (2) years of professional experience at a level equivalent to the County's class of Information Technology Analyst I – Server Design and Administration.

Licenses and Certifications:

- Possession of, or ability to obtain and maintain, a valid California or Nevada Driver's License and a satisfactory driving record.

PHYSICAL DEMANDS

Must possess mobility to work in an office setting; use standard office equipment, including a computer; some positions may be required to operate a motor vehicle; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. Standing in and walking between work areas is frequently required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification frequently bend, stoop, kneel, and reach to perform assigned duties, as well as push and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects up to 25 pounds. Reasonable accommodations will be made for individuals on a case-by-case basis.

ENVIRONMENTAL CONDITIONS

Employees work in an office environment with loud to moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

WORKING CONDITIONS

Must be willing to work after hours, weekends, and holidays as needed. Must be able to pass a thorough background investigation.

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