



Office of Human Resources
IT Systems Architect - CI2214
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General Statement of Duties

Performs full performance information technology work in the planning, designing, developing, and monitoring of information systems (specializing in Windows, UNIX, Security, Telecommunications, Data Network, and/or Storage Area Network systems) utilized within an agency or throughout the city.

Distinguishing Characteristics

This class is distinguished from the Senior Information Technology System Administrator because the primary duties of this position are more operational in nature. Specifically, the Senior IT System Administrator is responsible for developing and maintaining information systems and updates. This class is also distinguished from the Senior Information Technology System Analyst because the primary duties of this position focus on analyzing, refining, and documenting the business requirements of clients. The IT System Architect focuses more on the planning, designing, and implementation of information systems and updates. In addition, the Information Technology System Architect is responsible for developing the processes and procedures for the integration and maintenance of new systems with existing information systems.

This class is distinguished from the Information Technology Project Manager because the primary duties of this position focus more on organizing, administering, and managing one or more information technology projects. While project management duties are performed by the IT System Architect, these duties are not the position's main focus. Similarly, this class is distinguished from the Information Technology Supervisor since the primary duties of this position involve formal supervisory responsibilities over IT professional incumbents. The IT System Architect does not perform any supervisory responsibilities.

Additionally, the IT System Architect possesses knowledge, skills, and abilities in highly specialized areas (such as Windows, UNIX, Security, Telecommunications, Data Network, and/or Storage Area Network), which provides strong support for the planning, designing, and developing functions performed by the position.

Essential Duties

Plans, designs, and implements citywide information systems including: operating systems, software, and hardware; plans, designs, and implements information systems for an agency on a project basis.

Researches and evaluates new technological advances in the external technology marketplace for the following:

- To assess current practices for compliance with the city's information systems requirements,
- To anticipate the city's future information system needs,
- To develop solutions to address current and future information system needs, and
- To create process improvements and controls.

Works closely with customers and colleagues to identify opportunities to utilize information systems to:

- Improve business processes,
- Promote the strategic use of information, and
- Enable seamless access to information.

Analyzes budget implications and technical requirements associated with implementing new system technologies or upgrading existing system technologies.

Works with customers to assess and make recommendations on:

- Information system needs and requirements,
- Impacts on the budget associated with implementing new system technologies or upgrading existing system technologies, and
- Possible alternatives to meet information system needs.

Coordinates disaster recovery plans which include: designing, testing, and maintaining systems protocols.

Designs and builds prototypes and working models of complex and/or new elements of an information system then directs colleagues with the development, execution, and review of test plans and results.

Trains colleagues on new information system technologies and requirements related to administration and operations.

Coordinates monitoring and maintenance of information systems, including:

- Tracking errors and data movements,
- Configuring software and hardware,
- Maintaining optimum system capacity levels,
- Developing dependency models to be used in risk management, and
- Maintaining consistent system standards agency/citywide.

Performs and documents system back-up and recovery or directs others to do so.

Writes or modifies software programs including analysis, writing specifications and code, program installation and documentation for use with multi-application, multi-user database systems.

Coordinates and monitors the troubleshooting of information systems on daily basis.

Coordinates with vendors the documentation and application of solutions to information system problems.

Develops and maintains a problem reporting system that includes: establishing a communication plan to alert users of the problem and monitoring the resolution of the problem.

Assists in the resolution of critical information system problems and complaints.

By position, may coordinate work activities and assign duties on a project basis.

Performs other related duties as assigned or requested.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

Competencies

Decision Making – Specifies goals and obstacles to achieving those goals, generates alternatives, considers risks, and evaluates and chooses the best alternative in order to make a determination, draw conclusions, or solve a problem.

Customer Service - Interacts with customers in a friendly and professional manner, works to resolve issues quickly and effectively, and is knowledgeable about products and services.

Creative Thinking – Uses imagination to develop new insights into situations and applies innovative solutions to problems; designs new methods where established methods and procedures are inapplicable or are unavailable.

Interpersonal Skills – Shows understanding, friendliness, courtesy, tact, empathy, cooperation, concern, and politeness to others and relates well to different people from varied backgrounds and different situations.

Planning and Evaluating – Organizes work, sets priorities, and determines resource requirements; determines short- or long-term goals and strategies to achieve them; coordinates with other organizations or parts of the organization to accomplish goals; monitors progress and evaluates outcomes.

Technical Competence – Uses knowledge that is acquired through formal training or extensive on-the-job experience to perform one's job; works with, understands, and evaluates technical information related to the job; advises others on technical issues.

Technical Problem Solving - Troubleshoots, diagnoses, analyzes, and identifies system malfunctions to determine the source and cause of the problem.

Knowledge & Skills

Knowledge of developments and new applications of information technology (hardware, software, telecommunications), emerging technologies and their applications to business processes, and applications and implementation of information systems to meet organizational requirements.

Knowledge of enterprise architecture principles, methods, and techniques.

Knowledge of the principles, methods, and techniques of IT project planning, management, monitoring, and evaluation.

Knowledge of current information systems trends and technologies.

Knowledge of data processing sufficient to be able to review program specification, design programs and write or modify code.

Knowledge of data processing hardware, monitors, operating system software, application programming and system configuration sufficient to be able to perform the duties related to the work assignment.

Knowledge of planning, coordination, and execution of business functions, resource allocation, and production.

Level of Supervision Exercised

May perform lead work on a project or rotating basis.

Education Requirement

Bachelor's Degree in Computer Science, Computer Information Systems, Business Administration, Mathematics, or a related field.

Experience Requirement

Three (3) years of professional information technology experience installing, maintaining, and/or modifying operating system and/or network operating system software and associated hardware. Two of these years must include experience in designing and implementing enterprise level systems and scalable solutions.

Education & Experience Equivalency

One (1) year of the appropriate type and level of experience may be substituted for each required year of post-high school education.

Additional appropriate education may be substituted for the minimum experience requirements.

Licensure & Certification

By position, may require a license or certification as it relates to the specific area of application.

Working Environment

Handles absentee replacement on short notice.
Occasional pressure due to multiple calls and inquiries.
Pressure due to multiple calls and inquiries.
Subject to long, irregular hours.
Subject to many interruptions.
Subject to pressure for multiple calls, inquiries, and interruptions.

Level of Physical Demand

1-Sedentary (0-10 lbs.)

Physical Demands

(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):

Fingering: Picking and pinching, through use of fingers or otherwise.
Handling: Seizing, holding, grasping, through use of hands, fingers, or other means.
Hearing: Perceiving and comprehending the nature and direction of sounds.
Lifting: Moving objects weighing no more than 10 pounds from one level to another.
Reaching: Extending the hands and arms or other device in any direction.
Repetitive motions: Making frequent or continuous movements.
Sitting: Remaining in a stationary position.
Talking: Communicating ideas or exchanging information.
Vision Near Acuity: Ability to perceive or detect objects at 20 inches or less.

Background Check Requirement

Criminal Check
Education Check
Employment Verification
By position, Motor Vehicle Record

Assessment Requirement

None

Probation Period

Six (6) months.

Class Detail

Pay Grade: I-817

FLSA Code: Y

Established Date: 9/21/2018

Established By: LS

Revised Date:

Revised By:

Class History: