General Statement of Duties

Performs full performance professional information technology work planning and coordinating the installation and configuration of operating system hardware and software and user application software; maintaining and repairing complex problems with system hardware and software; and modifying operating system hardware and software to increase performance and meet technical design requirements.

Distinguishing Characteristics

The Senior IT System Administrator is distinguished from the Staff IT System Administrator, which performs entry level professional information technology (IT) work installing and configuring operating system hardware and software and user application software; assists with the maintenance and repair of routine problems with system hardware and software.

The Senior IT System Administrator is also distinguished from the Associate IT System Administrator, which performs standard level professional information technology work installing and configuring operating system hardware and software and user application software; maintains and repairs routine to complex problems with system hardware and software.

Finally, the Senior IT System Administrator is distinguished from the IT System Architect, which performs full performance information technology work in the planning, designing, developing, and monitoring of information systems utilized within an agency or throughout the city. Additionally, the IT System Architect possess knowledge, skills, and abilities in highly specialized areas (such as Windows, UNIX, Telecommunications, Data Network, and/or Storage Area Network), which provides strong support for the planning, designing, and developing functions performed by the position.

Level of Supervision Exercised

By position, performs lead work.

Essential Duties

Plans and coordinates the setup, installation, and configuration of the operating system (including hardware and software), new software releases, and upgrades.

Monitors, tunes, diagnoses, and resolves complex operating system, application, and database problems; monitors network performance to determine future requirements.

Troubleshoots, maintains, and repairs complex problems, typically related to system failures, with servers, hardware, operating systems, security, applications, database structures, and data protection.

Implements and documents a backup and recovery process and leads capacity planning for a specific data system.

Plans, coordinates, and implements security measures to protect data, software, and hardware.

Develops, tests, and implements complex scripts to automate common functions or system operations.

Consults with users to identify existing system problems then evaluates and recommends various software and hardware solutions to meet user needs.
Analyzes equipment performance records to determine the need for repair or replacement. Recommends changes to improve systems and network performance, and determines hardware or software requirements related to such changes.

Develops, maintains, and publishes complex custom reports.

Consults with users to identify new business requirements then evaluates and recommends software and hardware solutions to meet user needs.

By position, performs lead work over subordinate employees or project management duties.

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

Attention to Detail – Is thorough when performing work and conscientious about attending to detail.

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.

Oral Communication – Expresses information to individuals or groups effectively; taking into account the audience and nature of the information; makes clear and convincing oral presentations; listens to others, attends to nonverbal cues and responds appropriately.

Problem Solving – Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and to make recommendations.

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.

Technology Application – Uses machines, tools, instruments, or equipment effectively; uses computers and computer applications to analyze and communicate information in the appropriate format.

Written Communication – Composes, reviews, edits, and issues written materials for diverse audiences and communicates purpose in a succinct and organized manner that is appropriate for context, time, and place.

### Knowledge & Skills

Knowledge of efficient learning techniques to acquire and apply new knowledge and skills; uses training, feedback, or other opportunities for self learning and development.

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 current networking and computer trends and technology.

Knowledge of network system hardware, network operating system software, data communications equipment and user-oriented application software packages sufficient to be able to troubleshoot and solve problems.

Knowledge of specifications, uses, and types of computer or computer related equipment.
Knowledge of electronic circuit boards, processors, chips, and computer hardware and software, including applications and programming.

Knowledge of computer network, desktop, server, and mainframe operating systems and their applications.

**Education Requirement**

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

**Experience Requirement**

Three (3) years of professional Information Technology experience installing, maintaining, and/or modifying application software, operating system and/or network operating system software and associated hardware.

**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, requires a valid Driver’s License at the time of application.

Licenses and certifications must be kept current as a condition of employment.

**Working Environment**

Work is primarily performed in an office setting and frequently at other locations for meetings.

Work involves pressure due to multiple calls and inquiries and is subject to interruption.

**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.):

Agility: bends, stretches, twists, or reaches out with the body, arms, or legs.
Balancing: maintaining body equilibrium to prevent falling over.
Carrying: transporting an object; usually by hand, arm, or shoulder.
Color vision: ability to distinguish and identify different colors.
Crawling: moving about on hands and knees or hands and feet.
Crouching: bending body downward and forward by bending legs.
Depth Perception: ability to judge distances and space relationships.
Eye/Hand/Foot Coordination: performing work through the use of two or more.
Feeling: perceiving attributes of objects by means of skin receptors.
Feeling: perceiving attributes of objects by means of spoken word.
Field of Vision: ability to adjust vision to bring objects into focus.
Field of Vision: ability to see peripherally.
Fine Dexterity: Coordinate eye-hand to operate a vehicle, reach, hold, grasp and turn objects.
Fingering: picking, pinching, or otherwise working with fingers.
Handling: seizing, holding, grasping, or otherwise working the hand(s).
Handling: seizing, holding, grasping, or otherwise working with fingers.
Hearing/Talking: Hear and determine direction of sound.
Hearing: perceiving the nature of sound by the ear.
Kneeling: bending legs to come to rest on one or both knees.
Lifting: raising or lowering objects weighing no more than 10 pounds, from one level to another.
Mathematical reasoning
Memorization
Mental Demands: mathematical reasoning, memorization, oral comprehension, spatial orientation, and written comprehension.
Neck Flexion: Moving neck upward/downward.
Oral Comprehension
Pulling: Exerting force upon an object so that it is moving to the person
Pushing: exerting force upon an object so that the object is moving away from the person.
Reaching: extending the hand(s) and arm(s) in any direction.
Repetitive motions: Making frequent movements with a part of the body.
Sitting: remaining in the normal seated position.
Standing: remaining one one’s feet in an upright position.
Stooping: Bending the body by bending the spine at the waist.
Talking: Expressing or exchanging ideas by means of spoken words
Vision Far acuity: ability to see clearly at 20 feet or more.
Vision Near acuity: ability to see clearly at 20 inches or less.
Vision: To observe animal behavior, read signs, and reading colors.
Walking: moving about on foot on uneven surfaces.
Walking: moving about on foot.
Written Comprehension.

**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-814
- FLSA Code: Y
- Established Date: 9/21/2018
- Established By: LS
- Revised Date: 
- Revised By: 
- Class History:

City and County of Denver