



## INFORMATION SYSTEMS SPECIALIST Classification Specification Non-Represented Management

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.*

### **DEFINITION:**

Under general direction, when assigned to infrastructure support, performs duties required to maintain and operate the network, endpoint devices, phone system, storage and server environments allowing the City, affected subsidiary agencies, and its contractors to operate. Activities related to security, patching, technology requirements assessments, disaster recovery planning, ensuring continuity, coordinating vendor support, performing project management, supporting end user needs and documenting work product are routine responsibilities.

Under general direction, when assigned to applications support, performs duties required for the administration of the City's software applications, related databases, reporting, monitoring performance, and assisting with determining staff technology needs. Activities related to software implementation, patching, coordinating testing, maintaining secure application environments, disaster recovery planning, ensuring continuity, serving as a liaison between department units and vendors or other technical staff, managing vendor relationships, performing project management, supporting end users on application issues, and documenting work product are routine responsibilities.

Incumbents assigned in either area will develop documented work plans, provide end user support, assist with physical hardware deployment, advise staff on workflow or processes, participate in governance processes related to change management and provide support as needed during public meetings.

### **DISTINGUISHING CHARACTERISTICS:**

The **Information Systems Specialist** is the Non –Represented classification responsible for the administration and maintenance of the City's technology infrastructure and applications, including networks, hardware and applications for all City departments.

### **SUPERVISION RECEIVED/EXERCISED:**

General supervision is received from the Information Systems Manager. May exercise direction over lower level technical and support staff and contracted services.



**ESSENTIAL FUNCTIONS:** *(The following is a typical list of duties assigned to the Information Systems Specialist. The duties included in this list are examples and are not intended to be all-inclusive or restrictive.)*

**INFRASTRUCTURE SUPPORT**

- Plans and implements hardware installation and upgrades; maintains physical technical infrastructure, directories, phone infrastructure and system documentation; plans and implements operating system and application upgrades.
- Repairs, patches and provides support to systems; support several sites and datacenter.
- Determines hardware and operating system resource requirements.
- Installs, configures and maintains network, network devices and physical infrastructure. Monitors security and updates system documentation.
- Provides and coordinates user support and training in the use of applications and hardware.
- Plans, designs, and set up LANs and WANs to meet connectivity requirements. Diagnoses and resolves application connectivity problems and system hardware conflicts.
- Monitors and maintains the network infrastructure; evaluates hardware and bandwidth use, traffic pattern and volume analysis; tailor and tune for optimal performance.
- Develops and maintains system security and firewall requirements. Recommends requirements ensuring the City's technology environment is secure and protecting constituent information.
- Informs and trains users in equipment and software operation; analyze and make recommendations on response time, training design, user support needs, or customer satisfaction.
- Plans, implements and administers backups, disaster recovery operations, and periodically audit related activities by performing test recovery. Conducts analysis of capacity planning, fault tolerance, and disaster recovery.
- Prepares and maintains technical documentation and procedures; performs preventative maintenance and repair hardware.
- Researches, evaluates, and tests hardware and software products, and systems solutions; installs, configures, and tests hardware and software; prepares reports or proposals for service.



- Coordinates and implements system security; approves departmental requests for access to enterprise systems; coordinates network security and installation requirements with the Information Technology Manager.
- Consults with users on re-engineering business processes and the use of technology, products, and services; develops and conducts training in operation and use of hardware and software.
- Coordinates equipment deliveries, software licensing compliance, inventory, and asset control.
- Performs security administration by maintaining accounts, adding, purging, and migrating users.
- Troubleshoots issues; provides resolution to desktop communication problems and remote system connections; troubleshoots software, equipment errors, and coaches users in correcting reported problems.
- Confers with vendors and assesses applicability to City's needs; recommends solutions; confers with contracted computer service vendors to determine feasibility and cost effectiveness of alternative systems design; serves as liaison between vendors, purchasing and departments.
- Coordinates maintenance of personal computer hardware and peripheral equipment, performs routine maintenance and contacts service vendors as necessary.
- Develops documentation, project plans and work breakdown to meet user needs and prepares related materials; maintains the documentation library of hardware resource materials and physical inventory.
- Responds to questions and concerns from employees regarding network or software problems; provides information as appropriate and resolves complaints; develops curriculum and training aids; schedules and conducts training sessions.
- Participates in the required Adjusted Workweek Program, 24-hour on call, and is available during emergencies, holidays, weekends, and after-hours.
- Performs other related and peripheral duties as required and necessary for the successful performance of this job.



### APPLICATIONS SUPPORT

- Supports applications and their usage through the use of query and reporting tools, by coding interfaces, scripts, patches, and installing packaged updates; maintains directories, databases, and web pages.
- Researches, evaluates, and tests proposed products, product versions, and systems solutions; coordinates design, installation, and support activities with application vendors.
- Consults with users on re-engineering business processes and the use of technology, products, and services; develops and conducts training in operation and use of hardware and software.
- Informs and trains users in equipment and software operation; analyzes and recommends response time, training design, user support needs, or customer satisfaction.
- Performs security administration by maintaining accounts, adding, purging, and migrating users.
- Prepares and maintains technical documentation and procedures; performs preventative maintenance and address potential issues before service outages arise.
- Troubleshoots issues; provides resolution to desktop communication problems and remote system connections; troubleshoots software, equipment errors, and coaches users in correcting reported problems.
- Confers with vendors and assesses applicability to City's needs; recommends solutions; confers with contracted computer service vendors to determine feasibility and cost effectiveness of alternative systems design; serves as liaison between vendors, purchasing and departments.
- Develops documentation, project plans and work breakdown to meet user needs and prepares related materials; maintains the documentation library of application resource materials and software catalog.
- Responds to questions and concerns from employees regarding network or software problems; provides information as appropriate and resolves complaints; develops curriculum and training aids; schedules and conducts training sessions.
- Serves as business process resource on all matters involving the support, maintenance, enhancement, and upgrade of the City's integrated enterprise systems; provides functional support, analysis, and design specifications to vendors.



- Troubleshoots, provides production support, identifies problem areas, and corrects system set-up when production errors are identified; works directly with vendors for resolution of underlying system program problems; searches corporate Web sites for posted resolutions and fixes that could resolve identified problems; coordinates workload to prioritize all jobs.
- Coordinates and participates in the design and evaluation of business processes required for the implementation of enterprise systems modules and upgrades; analyzes new components to determine if previously modified processes can be eliminated and/or if new release will also require modification; participates in system testing to ensure that the new release provides the expected results throughout the business cycle.
- Reviews and evaluates existing City business process models to identify potential areas for automation and streamlining; develops recommendations for new or modified processes; tests all changes prior to final implementation to ensure appropriate results.
- Coordinates with user departments on new/changed local ordinances, legislation, reporting, and regulations; reviews, analyzes, and tests all changes prior to final implementation to ensure appropriate results.
- Coordinates and implements system security; approves departmental requests for access to enterprise systems; coordinates network security and installation requirements with the Information Technology Manager.
- Participates in the required Adjusted Workweek Program, 24-hour on call, and is available during emergencies, holidays, weekends, and after-hours.
- Performs other related and peripheral duties as required and necessary for the successful performance of this job.

**QUALIFICATIONS:** *(The following are minimal qualifications necessary for entry into the classification.)*

**Education and/or Experience:**

Any combination of education and experience that has provided the knowledge, skills and abilities necessary for an Information Systems Specialist. A typical way of obtaining the required qualifications is to possess five (5) years of increasingly responsible experience with application support or systems and network administration, including one (1) year of experience in research, analysis and development of solutions to user problems; a Bachelor's degree from an accredited college or university in major coursework in computer science, information systems or a related field is highly desired; and a High School diploma or GED. Nine (9) years of increasingly responsible experience in application support or systems and network administration, or a combination of experience with industry certifications, may be substituted for degree requirement.



**License/Certificate:**

Possession of, or ability to obtain, a valid class "C" California driver's license.

**KNOWLEDGE/SKILLS/ABILITIES:** *(The following are a representative sample of the KSA's necessary to perform essential duties of the position.)*

**Knowledge of:**

IT frameworks or models, hardware and software, network systems and peripheral equipment; telecommunications systems; principles and techniques for IT systems analysis, design and administration; principles and techniques for work planning, scheduling, measurement and reporting; methods for evaluating competing solutions; project management concepts, and a variety of operating systems, protocols, cabling methods and networking techniques.

**Skill to:**

Resolve technical problems and innovate more efficient use of IT resources; perform systems analysis work and problem solving; interpret and follow written and oral instructions; prepare concise reports and documents; utilize applications and operate equipment necessary to perform aforementioned skills.

**Ability to:**

Organize IT operations and their component parts into logical systems; analyze user needs and develop cost effective solutions utilizing appropriate technology; read and interpret complex manuals, documentation and reports relative to proper systems operations; install applications, telecommunication and infrastructure equipment; conduct training on systems operations; prepare clear and concise written instructions on systems operations; work with current operation platforms and systems; understand and interpret technical information (verbal and written); perform project management; adapt to rapidly changing technology; establish and maintain effective working relationships with staff, customers, other employees, and the public; communicate effectively with people at all organizational levels.



**WORKING CONDITIONS:**

Position requires prolonged or intermittent sitting, standing, walking on level, uneven, or slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting and crouching. The position also requires grasping, repetitive hand movement and fine coordination in preparing reports and using a computer keyboard in the performance of daily duties. Additionally, the position requires near and far vision when reading correspondence and using a computer and acute hearing is required when providing phone service and communicating in person. The need to lift, carry, push, and pull files, reports and other materials weighing up to 40 pounds is required. The employee may occasionally be required to travel to different sites and locations; when working outdoors the incumbent may encounter extreme weather conditions, including wet, hot, cold, wind, snow, ice, and heavy vehicle traffic. The noise level in the work environment is usually quiet to moderate when indoors and moderate to loud when outdoors.

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