

SYSTEMS ADMINISTRATOR

Approved: July 8, 2022

FLSA: Non-Exempt

Unit: SEIU



Definition
Under general supervision, assists in the planning, coordination, and implementation of activities, operations, and duties in support of the City's information technology systems, security, and systems infrastructure; researches, installs, configures, deploys, upgrades, and maintains the enterprise systems to avoid interruptions in services and ensures data integrity; coordinates assigned activities with other departments and outside agencies; trains and assists end users in using new applications and systems; coordinates projects related to management of interfaces, applications setup and configuration, business process review, and custom reporting; provides expert troubleshooting, resolution, and reporting on business applications issues; provides highly technical and complex staff assistance to the Information Technology Manager; and performs related duties as assigned.
Supervision received and exercised
Receives general direction from the Information Technology Manager or assigned manager. May exercise direct supervision over technical staff and provides technical and functional direction to contractors and other temporary staff.
Class characteristics
This is a single-position class responsible for application infrastructure management and cybersecurity. The primary purpose of this role is to use experience and expertise to resolve technical problems and design new solutions relating to information technology enterprise systems and systems infrastructure. Responsibilities include the definition of needs, benefits, and technical strategy; research and development within the project implementation and management lifecycle; technical analysis and design; and executing, testing, and rolling-out enterprise solutions, and providing technical support to City staff. The Systems Administrator exercises independent judgment in the management of applications and assignments, within general guidelines and professional and administrative standards. This classification is distinguished from the Enterprise Applications Support Specialist in that the latter primarily manages department software applications systems while the Systems Administrator exercises responsibilities for cybersecurity and application infrastructure management across departments. This classification is further distinguished from the Information Technology Manager in that the latter has full management and supervisory authority in planning, organizing, and directing the full scope of information systems operations.
Examples of typical job functions (illustrative only)
Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job. <ul style="list-style-type: none">• Use cybersecurity tools to monitor for new cyber threats; implement mitigations to cybersecurity and server infrastructure to address identified vulnerabilities.• Analyze inbound email for malicious trends; perform remediation actions to minimize malware/ransomware risks to the organization; monitor and adjust email security rules to mitigate phishing attempts against the organization.•• Manage virtual and physical server application infrastructure; analyze current application infrastructure landscape; develop plans to retire obsolete applications; configure and maintain system infrastructure.• Monitor current infrastructure capacity (CPU, memory, and storage) and make adjustments, as necessary, to ensure uninterrupted service.• Deploy new virtual machines as necessary to support new application deployments; develop and execute plans to replace End of Life hardware; provide end-user application support.• Manage virtual machines in existing and new environments.• Perform database tuning, job scheduling, and migrations.• Provide end user application support and assist other team members as needed.• Review, design, and document processes to create efficiencies via implementation of standard operating procedures.• Perform administrative tasks, such as computer inventory, software-licensing inventory, review support agreements, etc.• Manage software improvements for various departments. These activities include procurement recommendations (e.g., cost-benefit analyses, software configuration, and implementation/reimplementation, etc.); collaborate testing configurations with personnel of affected departments; and communicate with internal customers, and network administrator.• Provide project coordination and oversight of multiple applications system projects.

- Assist with research of applications software products and services and coordinate feasibility studies for applications, software, and system products under consideration for purchase, and provide findings.
- Provide cost estimates for end user hardware refreshes, server infrastructure refreshes, and server support contracts.
- Develop and deploy standards, methodologies, and best practices for applications deployment, and application interfaces.
- Document procedures, applications interfaces, service-level agreements, and other methodologies related to applications systems.
- Collaborate in the testing of applications, and communicates and works with internal IT staff, vendors, and software developers to ensure quality assurance and fulfillment of contractual obligations.
- Compile and maintain an inventory of all applications software and system assets and documents system configurations and change management.
- Oversee the maintenance, support, and upgrade of existing software applications and systems; coordinate and communicate upgrades, enhancements, and changes with vendors and internal customers.
- Maintain a secure information technology environment for software applications; oversee applications security administration, update processes, and schedules; notify users of any potential service interruptions.
- May participate in integration, initialization, and interfacing between multiple systems, either through in-house or outsourced development.
- May provide oversight and direction to lower level staff and contractors.
- Perform other duties as assigned.

Qualifications

Knowledge of

- Windows server and desktop operating systems, client-server, web-based, cloud-based applications.
- Various database systems management, report writing, application interfaces, and data import/export methodologies.
- Principles and practices of application system information security and best practices.
- Modern principles and practices of installing, configuring, maintaining, troubleshooting, and monitoring application, network, server, and systems infrastructure.
- Physical and virtual network and server infrastructure including hardware, software, real-time monitoring tools, peripherals, and devices.
- VMware and Hyper-V virtualization software
- Current application technology goals, objectives, and technological trends.
- Principles of project management, including training and vendor management.
- Office procedures, methods, and equipment, including computers and applicable software applications such as word processing, spreadsheets, and databases.
- Applications system security principles and best practices for ongoing system security, including related concepts of user applications roles/passwords, single sign-on, and directory services.

Ability to

- Plan and coordinate business applications systems implementations and upgrades.
- Monitor and analyze network and server performance; review system event/audit logs; perform root cause analysis; implement solutions; and perform capacity planning.
- Analyze problems; identify alternative solutions; project consequences of proposed actions; and implement recommendations in support of goals.
- Research, develop, and recommend cost-effective technical systems improvements.
- Review and assist in evaluating the work of technical staff and provide technical and functional direction to contractors and other temporary staff.
- Communicate ideas, directions, and requirements clearly and concisely, both orally and in writing.
- Understand and communicate ideas in a technical but user-friendly language.
- Perform duties appropriate to classified system privileges, including maintaining professional handling and protection of confidential and secure information.
- Organize own work, set priorities, and meet critical deadlines; manage projects in a timely manner.
- Work with information system users under challenging conditions and short deadlines.
- Set priorities based on value to the organization.
- Operate office equipment, including computers and related word processing, presentation, spreadsheet, and database applications.

Education and experience

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

- Equivalent to graduation from an accredited four-year college or university with major course work in computer science, information technology, business administration or a related field; and
- Three (3) years as of experience at the journey level or above, in a role responsible for supporting a broad range of departmental applications systems, including business process improvement, application administration, implementation, cybersecurity, and upgrades.
- Possession of industry certification is highly desirable (Microsoft, Nutanix, Security, Virtualization, or a closely related certification*).

*Please note: Rapidly changing technology may require substitution of products specified above, as directed by the Information Technology Manager without update to the job class specification.

Licenses and certifications

Possession of, or ability to obtain a valid California Driver license by time of appointment.

Physical demands

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; 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 30 pounds with the use of proper equipment.

Environmental elements

Employees work in an office environment with moderate levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or members of the public.