October 2018
FLSA: EXEMPT
CLASS CODE: 01317

INFORMATION TECHNOLOGY SYSTEMS ADMINISTRATOR

DEFINITION

Under general supervision, assists in the planning, coordination, and implementation of the activities, operations, and duties in support of the Court's enterprise-wide information technology network; researches, installs, configures, operates, and maintains data network infrastructure; researches and implements new systems, programs, and hardware and software upgrades in order to optimally serve Court staff and partners and enable ongoing innovation within the infrastructure; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Information Systems Manager. Exercises no direct supervision of staff.

CLASS CHARACTERISTICS

This classification is responsible for implementing, and maintaining the Court's computer network infrastructure, including hardware, operating systems, and desktop/network applications. Responsibilities include assisting project teams with technical issues throughout the lifecycle of a project, including needs, benefits, strategy, research, development, technical analysis, design, testing, execution, and roll-out; oversees daily operations of the Court web application and database systems. Successful performance of the work requires extensive knowledge of information technology infrastructure, systems, operations, maintenance, and repair.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

- Designs, analyzes, implements, and manages Court-wide physical and virtual network and server infrastructure and data storage systems to accommodate Court needs; ensures the functionality and operational stability of network and server infrastructure and systems.
- Administers servers and databases; maintains the backup system for the Court's data; designs, configures, and implements disaster recovery and backup solutions and procedures.
- Monitors and analyzes network and server performance; reviews system event/audit logs; detects problems and identifies inefficient use of resources.
- Installs, builds, manages, and maintains multiple physical and virtual servers, workstations, and terminals, ensuring proper integration of these components with existing system architecture; develops and maintains installation and configuration procedures; contributes to and maintains system standards.
- Supports the Court's case management system by maintaining application and database software patches and performance; acts as the Court's database administrator for all relational database management systems.
- Implements, monitors, and maintains network security for the Court; verifies and ensures proper user accessibility; creates and manages user storage locations allocating appropriate security to shared resources; responds to and resolves computer security issues; performs daily backup operations.

- Installs, configures, and maintains all network hardware, software, peripherals and devices, including switches, routers, and firewalls, for functionality and security; ensures data and voice network availability and performance meet Court needs.
- Configures and programs network monitoring systems; monitors the performance of the network system; optimizes & tunes operating systems to resolve performance issues; reviews system and application logs; tracks possible problem areas affecting response time and prepares recommendations for correction of problems and improvement in performance.
- Implements new systems, programs, and hardware and software upgrades; upgrades administrative tools and utilities; identifies, analyzes, and resolves software and network problems; configures and adds new services as necessary.
- Provides support to account users as requested; investigates and troubleshoots issues; repairs and recovers from hardware or software failures; assists with the procurement model for server network, storage, and other information technology infrastructure systems; creates and maintains a library of system documentation; trains information technology staff as needed.
- Stays abreast of new trends and innovations in technology related to the Court operations; researches, recommends, and evaluates cost-effective vendor solutions and technologies; implements improvements; works with staff to maintain, revise, or improve the information technology operations.
- Performs file archival and purge as necessary; identifies solutions for and monitors symptoms; creates, changes, or deletes user accounts as requested;
- Performs performance reporting in order to support capacity planning; performs ongoing performance tuning, hardware upgrades, and resource optimization as required; configures CPU, memory, and disk partitions as needed.
- Develops reports and methods for data exchange between the Court's case management system and various stakeholders, including but not limited to internal users, partnering state and/or county agencies, and software developers.
- Confers with information technology staff on enhancing the Court's web application in order to support business goals of the Court.
- Implements, maintains, and enforces policies and procedures for network administration.
- Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
- Performs other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Principles and practices of network administration, network security policies and procedures, backup procedures, and information systems pertaining to the Court.
- Linux administration, web technologies, database technologies, automation/scripting, and enterprise server and storage administration.
- Network systems analysis and troubleshooting principles and procedures.
- Computer hardware and software applications, including network essentials, peripheral equipment, and network security.
- Design, operations, properties, and capabilities of networks and network cabling.
- Operating characteristics, capabilities, and limitations of computers and related peripheral equipment.
- Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned functions and responsibilities.
- A variety of scripting and programming languages.
- Principals and practices of establishing and maintaining network security.
- Structural Query Language (SQL) and relational database design concepts.
- Research techniques, methods, and procedures.

- Technical report writing practices and procedures.
- Principles and procedures of record-keeping and reporting.
- Modern office practices, methods, and computer equipment and applications related to the work.
- English usage, spelling, vocabulary, grammar, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and Court staff.

Ability to:

- Analyze complex network practices and operations and develop solutions.
- Troubleshoot and diagnose specific problems with the network, computers, and associated equipment.
- Provide recommendations on new or existing network and computer hardware and software systems.
- Perform complex diagnostic and technical service.
- Operate, install, maintain, configure, and troubleshoot a variety of highly technical computer equipment and peripherals.
- Use network operating systems such as Linux, in multi-tiered network environments
- Engineer and administer network equipment including but not limited to routers, switches, firewalls, and wireless access points.
- Perform difficult computer information system network installation, repair, and maintenance work.
- Analyze problems, identify alternative solutions, project consequences of proposed actions, and implement recommendations in support of goals.
- Interpret, apply, explain, and ensure compliance with applicable Federal, State, and local policies, procedures, laws, and regulations.
- Research, develop, and recommend cost-effective technical system improvements.
- Prepare and maintain accurate and complete records, clear and concise reports, and technical documentation.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- Operate modern office equipment including computer equipment and specialized software applications programs.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Understand scope of authority in making independent decisions.
- Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

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 college or university with major coursework in computer science, information technology, or a related field, and four (4) years of responsible network management, computer systems, systems analysis, or related experience.

Licenses and Certifications:

- Possession of, or ability to obtain, a valid California Driver's License by time of appointment.
- Systems Administration or Systems Engineer certification in Linux or equivalent is highly desirable.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and to visit various Court and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. This is primarily a sedentary office classification although standing and walking between work areas is 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 bend, stoop, kneel, reach, 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 weighing up to 50 pounds.

ENVIRONMENTAL ELEMENTS

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and exposure to dust, fumes and allergens. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.