

## **SYSTEMS ADMINISTRATOR**

### **BASIC FUNCTION**

Manages the strategic and daily operations of the District's information systems including cloud services, database management, software distribution and upgrades, user profile management, version control, backup and recovery, and performance and security; creates and manages a variety of operating platforms; designs and documents interfaces to integrate systems; and assists District employees with technical issues concerning administrative software.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the assigned area supervisor. Exercises technical and functional direction over and provides training to lower-level staff.

### **CLASS CHARACTERISTICS**

This classification is responsible for performing the full range of systems administrator functions for the District. Incumbents regularly work on varied and complex tasks requiring considerable discretion and independent judgment. Employees in the classification rely on experience and judgement to perform assigned duties. Assignments are given with general guidelines and incumbents are responsible for establishing objectives, timelines, and methods to complete assignments. Work is typically reviewed upon completion for soundness, appropriateness, and conformity to policy and requirements.

### **EXAMPLES OF TYPICAL JOB FUNCTIONS**

1. Manages, monitors, and maintains system activities for all administrative system servers; monitors and fine-tunes system parameters for maximum performance and ensures systems are operational, programs are functional, and data is accurate and available; manages and maintains storage space for all administrative software applications.
2. Ensures District administrative computer systems are backed up, that procedures are in place to protect and restore data, and the availability of programs, data, and database files for restoration.
3. Manages, installs, and maintains virtual servers, virtual datastores, hosts, and virtual networking; performs database maintenance and monitoring; installs software patches and upgrades for all administrative computer systems; configures printing solutions.
4. Evaluates, recommends, installs, configures, supports, programs, and maintains network security systems and solutions for the District; monitors equipment functions and usability; writes and maintains system-level scripts; installs hardware for all administrative servers; reviews performance utilization and maintains systems to maximize availability and accessibility; modifies firewall, router, and network monitoring system configurations to enable new servers or applications.
5. Monitors system performance to identify and troubleshoot deficiencies in design, security, installation, and/or integration with other technologies.
6. Evaluates technology, tools, software, and hardware equipment and recommends new technologies which would improve the department's operational effectiveness or services to stakeholders; interacts with vendors and consultants to maintain current knowledge of technical issues.
7. Develops and recommends comprehensive standards, policies, procedures, and technical documentation pertaining to system maintenance and infrastructure; writes and maintains user and technical operating instructions and documentation; provides training to users and other technical staff and advises on best practices.

8. Provides specialized and complex technical support and assistance to staff concerning assigned systems; serves as contact to resolve related issues, conflicts, and concerns; responds to inquiries and provides information concerning system operations, projects, malfunctions, equipment, upgrades, practices, procedures, and related software applications.
9. Serves as a project leader on assigned projects, coordinating and inspecting the work of professional and technical staff; determines project requirements, business needs, and purpose or justification; identifies stakeholders and functional area participation; refines project requirements, scope, objectives, deliverables, acceptance criteria, constraints, assumptions, and alternative solutions; estimates activity costs and overall project budget; identifies roles and responsibilities; determines information and communication needs of stakeholders.
10. Develops additional skills, knowledge, and abilities through education, training, in-services, seminars, and conferences to maintain and enhance the level of knowledge and skills required to satisfactorily complete job assignments, to stay current with technology trends related to areas of responsibility, as well as to provide recommendations to improve software applications and procedures.
11. Participates in District-provided in-service training programs.
12. Performs other related duties as assigned; specific duties not listed does not exclude them for this classification if the work is similar or related.

## **QUALIFICATIONS**

### **Knowledge of:**

1. Operations and services of a comprehensive information technology program and integration of technology components across multiple platforms.
2. Principles, methods, and techniques in the design and operation of information systems, computers, and platforms.
3. Principles of client-server computing systems.
4. Principles and practices of network and server management.
5. Advanced troubleshooting, configuration, and installation techniques including scripting and custom computer profiles and policies.
6. Principles of computer and cloud-based operating systems, enterprise infrastructure, and peripheral components.
7. Advanced principles and practices of technology system security.
8. Principles and practices of systems analysis.
9. Principles and practices of project management.
10. Server-based operating systems and desktop software applications, including system standards and protocols.
11. Client-server processing requirements and constraints.
12. Recordkeeping principles and procedures.
13. Principles, practices, equipment, and protocols for the design, installation, and operation of data communication networks and associated equipment and devices.
14. Advanced principles and practices of database administration and management.

### **Ability to:**

1. Provide advanced technical support to a diverse range of technology systems, hardware, and software.
2. Analyze complex user problems, evaluate alternatives, and devise efficient, cost-effective, and user-friendly solutions.
3. Develop scripts and programs for system level integration, administration, and processing using various tools.
4. Manage, monitor, and maintain storage infrastructure, web services, and technologies.,

5. Communicate complex technology applications issues clearly to non-technical parties, orally or in writing.
6. Assist in developing and implementing technology goals, objectives, practices, policies, procedures, and work standards.
7. Prepare clear, concise, and accurate documentation, user guides, reports of work performed, and other written materials.
8. Implement actions and processes to ensure the integrity of system data.
9. Implement database and/or system security measures.
10. Utilize appropriate diagnostic and testing equipment to detect and resolve hardware and software issues.
11. Test, diagnose, program, calibrate, and repair a wide variety of electronic systems and equipment.
12. Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
13. Independently organize work, set priorities, meet critical deadlines, and follow up on assignments.
14. Exercise independent judgment within general policy and procedural guidelines.
15. Effectively use computer systems, software applications relevant to work performed, and business equipment to perform a variety of work tasks.
16. Communicate effectively in the course of performing work tasks.
17. Establish, maintain, and foster effective working relationships with those contacted in the course of work.
18. Demonstrate clear evidence of sensitivity and understanding of the diverse academic, socio-economic, disability, and ethnic backgrounds of students, staff, and the community.
19. Provide efficient, high-level customer service to the public, vendors, contractors, and District personnel.

**Education and Experience:**

A bachelor's degree with coursework in computer science or a related field and five (5) years of progressively responsible professional experience in the design, development, installation, and maintenance of server and network infrastructure, and associated hardware and software; or an equivalent combination of education, training, and/or experience.

**Licenses and Certifications:**

None.

**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. This classification primarily works in an office and standing in and walking between work areas is occasionally required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Employees in this classification occasionally 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 up to 50 pounds. Employees must be able to use a stepstool and climb a ladder.

The essential functions of this classification must be performed by the incumbents with or without reasonable accommodations.

**ENVIRONMENTAL CONDITIONS**

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset individuals in interpreting and enforcing departmental policies and procedures.