

## **ENTERPRISE NETWORK ADMINISTRATOR**

### **DEFINITION**

Under general supervision, assists in the planning, coordination, and implementation of the activities, operations, and duties in support of the District's enterprise-wide information technology network; administers the local area and wide area network for the District which involves the creation and maintenance of the user environment; researches, installs, configures, and maintains all components of the data network infrastructure; implements new systems, programs, and hardware and software upgrades; coordinates assigned activities with other departments and outside agencies; provides technical and complex staff assistance to the Manager, Network Data and Security.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the Manager, Network Data and Security. Exercises no direct supervision of staff.

### **CLASS CHARACTERISTICS**

This classification is responsible for implementing, and maintaining the District's computer network infrastructure, including hardware, operating systems, and desktop/network applications. Responsibilities include maintaining network firewalls, routers, and switches, administering enterprise computer application systems, and providing technical support to District staff. Successful performance of the work requires extensive knowledge of information technology infrastructure, systems, operations, maintenance, and repair. This class is distinguished from the Academic Network Administrator in that it assists in the planning, coordination, and implementation of the activities, operations, and duties in support of network administration for an academic division within the District. This class is distinguished from the Enterprise Network Security Analyst in that the latter provides a subject matter expert level of support and is responsible for system design of centralized desktop and server management initiatives within the enterprise-wide network architecture.

### **EXAMPLES OF ESSENTIAL JOB FUNCTIONS (Illustrative Only)**

- Builds, manages, and maintains multiple physical and virtual servers, workstations, and terminals, ensuring proper integration of these components with existing system architecture.
- Maintains enterprise computer applications on various servers such as Active Directory, Lightweight Directory Access Protocol (LDAP) deployment, including creating and managing organizational units, user accounts and groups, and computer groups; assigns security permissions to organizational units, user accounts and groups, and computer groups.
- Implements, monitors, and maintains network security for the District; 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.
- Installs, configures, and maintains all network hardware, software, peripherals and devices, including switches, routers, and firewalls, for functionality and security; configures and maintains print and file shares.
- Configures and programs network monitoring systems; monitors the performance of the network system; optimizes & tunes operating systems to resolve performance issues, troubleshoots network connectivity problems; 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; supports technical requirements of software for users; identifies, analyzes, and resolves software and network problems.

- Stays abreast of new trends and innovations in technology related to the District operations; researches, recommends, and evaluates vendor solutions and technologies; implements improvements; works with staff to maintain, revise, or improve the information technology operations.
- Confers with vendor representatives to identify and correct causes of hardware and software malfunctions and to perform enhancements.
- Implements backup policies and procedures; performs system backups; restores corrupt files from backup systems.
- Implements, maintains, and enforces policies and procedures for network administration.
- Responds to inquiries from information technology support and other departmental staff; documents and communicates problem resolutions with other network administrators and information technology staff involved in maintaining the network; writes network maintenance procedures; coordinates activities with the Manager, Network Data and Security.
- Identifies opportunities for improving service delivery methods and procedures; reviews with appropriate management staff and implements improvements; works with District staff to maintain, revise, or improve the overall information technology operation.
- Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
- Performs other related duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

- Principles and practices of heterogeneous network administration, network security policies and procedures, backup procedures, and information systems pertaining to assigned District division or department.
- Unix administration, web technologies, Microsoft 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.
- 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, students, and District staff, including individuals of various ages, disabilities, socio-economic and ethnic groups.

### **Skills & Abilities 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 Windows, Linux, and Apple OSX in multi-tiered network environments.
- 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 a regionally accredited four-year college or university with major coursework in computer science, information technology, or a related field, and three (3) years of responsible network management, computer systems, systems analysis, or related experience.

#### **Licenses and Certifications:**

- The incumbent may periodically be required to travel to a variety of locations. If operating a vehicle, employees must have the ability to secure and maintain a valid California driver's license.
- Certified Information Systems Security Professional (CISSP), Security+, Certified Ethical Hacker (CEH), and/or Global Information Assurance Certification (GIAC) Security Essentials Certification (GSEC) preferred.

#### **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 to visit various District 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, and occasionally heavier weights with the use of proper equipment.

**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 staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.