

## **SYSTEM ADMINISTRATOR**

**DISTINGUISHING FEATURES OF THE CLASS:** This position is responsible for the effective installation, configuration, operation, and maintenance of systems hardware, software, and related infrastructure. The System Administrator functions as a lead worker including responsibility for training, instruction, setting the work pace, and evaluating performance. The work is performed under the supervision of the Director or Assistant Director of Information Services in accordance with county computer systems policy. Does related work as required.

### **TYPICAL WORK ACTIVITIES:**

Ensures that system hardware, operating systems, software systems, and related procedures adhere to departmental policies and procedures;

Develops and maintains installation and configuration procedures;

Contributes to and maintains system standards;

Installs new or rebuilds existing servers and configures hardware, peripherals, services, settings, directories, storage, etc. in accordance with standards and project/operational requirements;

Installs and configures systems such as infrastructure applications;

Participates in research and development to enable continuing innovation within the infrastructure;

Researches and recommends innovative or automated approaches for system administration tasks; identifies approaches that best utilize available resources;

Sets up and maintains the computer servers and reviews the need for hardware or software upgrades;

Monitors systems, verifying the integrity and availability of server hardware, server resources, systems and key processes, reviewing system and application logs and verifying completion of scheduled jobs such as backups;

Oversees and performs regular security monitoring to identify possible intrusions;

Oversees and performs backup operations, ensuring all required file systems and system data are successfully backed up to the appropriate media, and media are recycled and sent off site as necessary;

Creates procedures and supervises the process of provisioning user accounts;

Repairs and recovers from server hardware or software failures;

Applies operating system patches and upgrades on a regular basis, and upgrades administrative tools and utilities;  
Configures or adds new services as necessary;  
Upgrades and configures system software that supports infrastructure applications or applications per project or operational needs;  
Maintains operational, configuration, or other procedures;  
Oversees and performs periodic performance reporting to support capacity planning;  
Oversees and performs ongoing performance tuning, hardware upgrades, and resource optimization as required;  
Maintains data center environmental and monitoring equipment.

**FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

Thorough knowledge of the principles and practices of information flow;  
Thorough knowledge of accepted information technology practices;  
Good knowledge of firewall management;  
Good knowledge of web filtering software and hardware;  
Good knowledge of current technology trends and technological developments;  
Good knowledge of logical operations of data communications devices;  
Good knowledge of local and wide area network administration;  
Working knowledge of data processing methodology and techniques;  
Ability to create a remediation plan and execute that plan fully;  
Ability to install and administer server hardware, software and networks;  
Ability to implement and maintain computer policies and procedures;  
Ability to communicate effectively, both orally and in writing;  
Ability to understand and interpret complex technical material;  
Ability to define and recommend computer enhancements or upgrades;  
Ability to establish and maintain effective working relationships;  
Ability to deduce problems logically.

**MINIMUM QUALIFICATIONS:**

- A) Graduation from a regionally accredited or New York State registered four year college or university with a Bachelor's degree or higher in computer science, management information systems, information resource management, computer engineering, or related field, and two years' experience with implementing and managing servers, mid-range systems, and network appliances ; or
- B) Graduation from a regionally accredited or NYS registered two year college with an Associate Degree in Computer Science, Information Systems or related field and four years' experience with implementing and managing servers, mid-range systems and network appliances; or
- C) An equivalent combination of training and experience as defined by the limits of A) and B) above.

**SPECIAL NOTE: Because of the radical evolution of technology in this field, qualifying experience must have been gained within the last five years.**