## SYSTEMS ADMINISTRATOR

**DISTINGUISHING FEATURES OF THE CLASS**: An employee in this class is responsible for managing virtualized and physical server infrastructure, including hardware and software; managing information technology (IT) business systems, such as antivirus, email and network security as well as providing Tier 2 and Tier 3 support for end users. Supervision is not a function of an employee in this class. Work is performed under the general supervision of the Assistant Director of Information Services (Technical Support) or a designee with wide leeway allowed in technical work details. Does related work as required.

**TYPICAL WORK ACTIVITIES**: The typical work activities listed below, while providing representative examples of the variety of work assignments in the title, do not describe any individual position. Incumbents in this title may perform some or all of the following, as well as other related activities not described.

Assists in the planning and migration of hosting from physical and virtual on-premise servers to cloud computing platforms such as Amazon Web Services (AWS) and Azure;

Maintains and creates virtual compute instances, storage and other cloud services required to support development projects;

Provides support for implementation, troubleshooting and maintenance of IT systems;

Manages IT system infrastructure and any processes related to these systems;

Provides support to IT systems including day-to-day operations, monitoring and problem resolution for all client/server/storage/network devices, and verifies completion of scheduled jobs such as backups;

Participates in all cyber security activities, including but not limited to system vulnerability scanning, compliance, centralized antivirus support, security accreditation package training and processing, system hardening, architectural diagram and viewpoint review, log reviews and package validation;

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

Develops and maintains installation and configuration procedures;

Contributes to and maintains system standards;

Applies operating system (OS) patches and upgrades on a regular basis, configures and adds new services as necessary, and upgrades administrative tools and utilities;

Performs on-going performance tuning, hardware upgrades, and resource optimization and configures central processing unit (CPU), memory and disk partitions as required;

### Systems Administrator

Documents the county's existing systems architecture and technology portfolio; makes recommendations for improvements and/or alternatives;

Conducts research on emerging technologies in support of systems development efforts and recommends technologies that will increase cost effectiveness and systems flexibility;

Develops, documents, communicates and enforces a policy for standardizing systems and software as necessary;

Develops and executes test plans to check infrastructure and systems technical performance; reports on findings and makes recommendations for improvement;

Provides guidance and training to other technical staff;

May be required to provide on-call support and/or work during nights, weekends and holidays to assist with the resolution of technical problems to minimize the disruption of production systems.

# FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL

<u>CHARACTERISTICS</u>: Thorough knowledge of the principles and terminology of physical, virtual and/or cloud-based server environments; thorough knowledge of IT business systems; good knowledge of state-of-the-art computer security; good knowledge of principles and practices of computer system (software and hardware) operations, analysis and troubleshooting; ability to install, configure, maintain and upgrade a variety of computer hardware and software, including operating systems and related peripheral components; ability to communicate effectively, both orally and in writing with other computer workers, outside vendors on equipment and related programs, and end users; ability to be flexible in scheduled work hours to meet the needs of the department; ability to establish and maintain effective working relationships; ability to work independently; initiative; tact and courtesy; sound judgment.

## MINIMUM QUALIFICATIONS: Either:

- A. Master's Degree in Computer Science, Information Technology, Information Systems or a related field and two (2) years of full-time paid, or its' part-time equivalent, experience which must have involved systems administration; **OR**
- B. Bachelor's Degree in Computer Science, Information Technology, Information Systems or a related field and three (3) years of full-time paid, or its' part-time equivalent, experience providing support for physical, virtual and/or cloud-based server environments, two (2) years of which must have involved systems administration; **OR**
- C. Associate's Degree in Computer Science, Information Technology, Information Systems or a related field and five (5) years of full-time paid, or its' part-time equivalent, experience providing support for physical, virtual and/or cloud-based server environments, two (2) years of which must have involved systems administration; **OR**

#### **Systems Administrator**

- D. Possession of a diploma or certificate of completion for a course of study in Computer Science, Information Technology, Information Systems or related field from a technical school licensed by the New York State Department of Education, and six (6) years of fulltime paid, or its' part-time equivalent, experience providing support for physical. virtual and/or cloud-based server environments, two (2) years of which must have involved systems administration; OR
- E. An equivalent combination of A, B, C and D above.

Note: College level study in Computer Science, Information Technology, Information Systems or related field may be substituted on a year for year basis for the above-mentioned degrees; must include a minimum of twelve (12) semester credit hours in computer science courses and a minimum of nine (9) semester credit hours in computer related mathematics courses. However, college courses may not be substituted for the two (2) years of experience which must have involved systems administration as mentioned above.

ULSTER COUNTY 7115 SYS ADMIN **Classification:** Competitive Grade: 19 Union: CSEA

Adopted: August 30, 2018 Revised: December 3, 2019