

Jurisdictional Class: Competitive
Adopted: January 1, 2001
Revised: May 16, 2024

NETWORK ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: This position performs technical work in the design, development, maintenance, repair, and operation of complex local and wide area computer networks. Work is performed under general supervision with considerable leeway given for the exercise of independent judgment in carrying out the details of the work. Supervision may be exercised over subordinate employees engaged in computer or network functions. The incumbent does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative only)

Monitors network health, performance optimization, and recommends system upgrades as needed;
Assists in the development and implementation of security standards and protocols to ensure system integrity;
Runs diagnostic software programs to insure operational integrity of equipment and network;
Installs and relocates hardware and software of workstations, network equipment, and servers including assembly and configuration in accordance with established procedures and instructions;
Installs and configures internet and e-mail access using appropriate security practices;
Completes mass duplication of network software;
Modifies programs by revising instructions or altering the sequence of operations, debugs new and modified programs to assure completion according to predetermined requirements;
Prepares input and output layouts, program documentation, and operator run manual procedures;
Interacts with individuals who will be using the final product to interpret the needs of the local user;
Develops curriculum for in-house training of end-users, and coordinates and conducts computer workshops for users;
Assigns work tasks, provides technical and procedural methods and reviews work for completeness and accuracy of less experienced staff;
Troubleshoots hardware and software network problems and repairs workstations and peripherals;
Receives user calls regarding network related problems and performs the appropriate action to resolve the problem;
Configures desktop environment through network policies;
Develops and maintains department website;
Uses computer applications or other automated systems such as spreadsheets, word processing, and database software in performing work assignments.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES & PERSONAL CHARACTERISTICS:

Good knowledge of network design concepts;
Good knowledge of computers and peripheral equipment;
Good knowledge of network operating systems, network hardware, client operating systems, communications protocols, and component wiring structure;
Good knowledge of modern office methods and techniques;
Skill in systems analysis, systems programming, applications programming and development, and web development;
Ability to issue complex oral and written instructions;
Ability to supervise;
Sound judgment.

Network Engineer

MINIMUM QUALIFICATIONS: Either:

- (a) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in computer science, computer technology, data processing, management information systems, information resource management, or related field and one (1) year of experience involving the configuration, installation, and maintenance of networks or computer systems; or
- (b) Graduation from a regionally accredited or New York State registered college or university with an Associate's Degree in computer science, computer technology, data processing, management information systems, information resource management, or related field and three (3) years of experience involving the configuration, installation, and maintenance of networks or computer systems; or
- (c) Graduation from a regionally accredited or New York State registered college or university with an Associate's Degree including or supplemented by thirty (30) credit hours in computer science, computer technology, data processing, management information systems, information resource management, or related field and three (3) years of experience involving the configuration, installation, and maintenance of networks or computer systems; or
- (d) An equivalent combination of training and experience as defined by the limits of (a), (b), and (c) above.

NOTE: Your degree must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education. If your degree was awarded by an educational institution outside the United States and its territories, you must provide independent verification of equivalency. A list of acceptable companies who provide this service can be found on the Internet at <http://www.cs.ny.gov/jobseeker/degrees.cfm>. You must pay the required evaluation fee.