

NETWORK ENGINEER I (BOCES #2)

DISTINGUISHING FEATURES OF THE CLASS: Under supervision of the Network Engineer II or higher level engineer, an incumbent of this position, located in the Lower Hudson Valley Regional Information Center (LHRIC) of Southern Westchester BOCES, is responsible for the installation, maintenance and relocation of network and associated equipment. This process also includes the installation of all network equipment software. This is the first level of the Network Engineer series, and the incumbent performs hands-on installation, maintenance and support of network equipment and peripherals used by LHRIC and its member school districts. Supervision is not a responsibility of this position. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Installs and relocates hardware and software of network equipment, including assembly, configuration and transport, in accordance with established procedures and instructions;

Assists with configuration of switching, wireless, voice over IP, and other network equipment;

Performs moves, adds, and changes to access switches, VoIP phones, wireless access points and other network equipment;

Monitors and responds to potential networking issues, including verifying power to routers, switches, voice over IP, and other networking equipment;

Performs periodic preventative maintenance in accordance with manufacturer recommendations and departmental standards;

Prepares network and associated equipment for installation;

Modifies, updates or replaces internal network equipment parts as required;

Modifies, updates or replaces network equipment software as required;

Performs lifecycle management of relevant systems including inventory, asset identification, documentation and asset retirement;

Lifts network equipment that may weigh as much as 50 lbs. to place in, arrange around, or remove from the workplace for set-up, installation, repair, maintenance, de-installation, or retirement of network equipment;

Responsible for logging and responding to network equipment related incidents using Enterprise Service Desk software, and performs the appropriate action to resolve the problem;

Responds to and remediates various networking issues, such as troubleshooting wireless LAN connectivity problems;

Assists internal and external customers with network connectivity issues, as necessary;

Informs supervisor as to the status of all operational issues and any necessary changes according to department change management process;

EXAMPLES OF WORK (Illustrative Only) (cont'd.):

Performs diagnoses of failures to determine whether they are induced by network software or hardware;

Notifies appropriate Information Technology staff of software or hardware failures and performs diagnostics;

Works with and assists contract and vendor supplied personnel engaged in the installation, maintenance and repair of network hardware and software;

Creates and maintains network documentation throughout the use of industry standard productivity suites;

Creates and maintains operating records and prepares routine operating reports;

Manages inventory of network and associated equipment;

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar, email and network management software in performing work assignments.

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Working knowledge of the components, operation, maintenance, configuration and repair of network equipment; working knowledge of network communications protocols and networking concepts; working knowledge of TCP/IP addressing and IP subnetting; working knowledge of wireless technologies and industry standards; working knowledge of network access control; working knowledge of network monitoring and management software, working knowledge of data communications and basic electronics terminology; working knowledge of standard communications protocols; familiarity with basic computer communications software and hardware test equipment; skill and dexterity in the use of tools; ability to communicate with outside vendors on equipment and related problems; ability to think logically; ability to comprehend moderately complex technical materials and understand basic wiring diagrams; ability to see all colors of wire for connection purposes; ability to move equipment and supplies weighing up to 50 pounds; ability to understand and carry out written and oral directions; ability to use computer applications such as spreadsheets, word processing, Visio, calendar, email and network management software; ability to read, write, speak, understand and communicate in English sufficiently to perform the essential functions of the position; good judgment; initiative; resourcefulness; reliability; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: A high school or equivalency diploma and either: (a) a Bachelor's Degree* in Information Technology or a closely related field and one (1) year of experience that involved the installation, operation, maintenance and problem diagnosis of network equipment including routers, switches and network communications protocols, or (b) six (6) years of experience as described in (a).

SUBSTITUTION #1: Satisfactory completion of 30 college credits* may be substituted on a year for year basis for up to four (4) years of the required experience.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE (cont'd.):

SUBSTITUTION #2:

Current CCNA (Cisco Certified Network Associate) Routing and Switching or CCNA Wireless certification may be substituted for six (6) months of the required experience. Current CCNP (Cisco Certified Network Professional) Routing and Switching or CCNP Wireless certification may be substituted for eighteen (18) months of the required experience.

*SPECIAL NOTE: Education beyond the secondary level must be from an institution recognized or accredited by the Board of Regents of the New York State Department of Education as a post-secondary, degree-granting institution.

SPECIAL REQUIREMENT: Possession of a valid license issued by the New York State Department of Motor Vehicles appropriate for the vehicle to be operated. The appointing authority is responsible for verifying and ensuring that the candidate meets these conditions at time of appointment and throughout the course of employment.

SPECIAL REQUIREMENT FOR APPOINTMENT IN SCHOOL DISTRICTS:
In accordance with the Safe Schools Against Violence in Education (SAVE) legislation, Chapter 180 of the Laws of 2000, and by the Regulations of the Commissioner of Education, candidates for appointment in school districts must obtain clearance for employment from the State Education Department prior to employment based upon a fingerprint and criminal history background check.