

SYSTEMS ENGINEER III  
(BOCES #2)

DISTINGUISHING FEATURES OF THE CLASS: Under supervision of the Network Technology Consultant, or other higher level technical employee, an incumbent of this position, located in the Lower Hudson Regional Informational Center (LHRIC) of Southern Westchester BOCES, is responsible for managing projects and providing technical support and guidance to team members in resolving complex and high priority issues involving servers and operating systems used by LHRIC and its member school districts. This is the highest level of the Systems Engineer series and the incumbent has managerial responsibility over project planning and execution; process development, maintenance, and improvement; and network design and deployment strategies. The Systems Engineer III assesses existing district systems and network storage and researches new network technologies in order to recommend and implement improved and enhanced service delivery to local school districts. Supervision of Systems Engineers I and II, as well as other subordinate technical staff, is an aspect of this position. Does related work as required.

EXAMPLES OF WORK (Illustrative Only):

Manages and oversees the resolution of complex incidents and problems that are logged in Enterprise Service Desk software and provides guidance to subordinate staff on appropriate action to be taken;

Performs root cause analysis and provides oversight and assistance as necessary on issues related to network operating systems, network storage and hypervisors involving specialized hardware and software;

Performs advanced troubleshooting and technical support for cloud based application solutions and e-mail systems;

Responsible for network design and development strategies for servers, network storage, hypervisors and end user devices;

Researches new networking technologies to determine their utility in enhancing performance for school districts;

Consults and collaborates with Project Managers and other higher level technical staff to plan, initiate and execute complex and high priority projects;

Oversees and advises on the creation of client images and software packages;

Oversees and performs the setup, installation, repair, maintenance and retirement of network equipment that may weigh as much as 50 pounds;

Audits and assesses existing district network systems, storage and hypervisors and makes recommendations for improvement and enhancement;

Oversees the creation and maintenance of network documentation through the use of industry standard productivity suites;

EXAMPLES OF WORK (Illustrative Only) (Continued):

Oversees the work of outside contractors and vendor-supplied personnel in the installation, maintenance and repair of server software and hardware;

Selects tools and applications that operate on the "enterprise" level, affecting consortium-wide operations;

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

Informs supervisor and subordinate team members of operational issues and their completion status as well as any required changes according to the department change management process;

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar, e-mail and database software in performing work assignments.

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Thorough knowledge of the components, installation, operation, maintenance, and repair of physical and virtual servers; thorough knowledge of server security and maintenance procedures; thorough knowledge of cloud application solutions, backup technologies, LAN/WAN networking components, client /server systems and network sharing; thorough knowledge of disaster recovery and business continuity planning; thorough knowledge of web server, IIS, domain controller and database server security; thorough knowledge of directory services; thorough knowledge of data communications and network concepts; thorough knowledge of drivers and system compatibility on all operating system platforms; thorough knowledge of software and protocols for data communications and server communications; ability to troubleshoot complex Level 2 and 3 systems issues and perform root cause analysis; ability to perform large systems network design; ability to plan, assign and review the work of others; ability to provide guidance and oversight to less senior technical titles; skill and dexterity in the use of tools; ability to communicate with outside vendors on hardware, software and related problems; ability to think logically and apply troubleshooting skills to resolve issues; ability to comprehend complex technical materials and understand basic wiring diagrams; ability to see all colors of wire for connection purposes; ability to communicate clearly, both orally and in writing; ability to move equipment (up to 50 lbs.) and supplies; ability to understand and carry out written and oral instructions; ability to use computer applications such as spreadsheets, word processing, Visio, calendar, email and database 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 three (3) years of experience where the primary function of the position was server administration, including the installation, operation, maintenance and problem diagnosis of servers and associated equipment, or (b) eight (8) 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.

SUBSTITUTION #2: Certification on the current Windows Server Operating System (or version immediately preceding) from a Microsoft Authorized Training Center, or certification on LINUX, may be substituted for six (6) months of the required experience.

SPECIAL REQUIREMENT: At time of appointment, possession of a valid license, appropriate for the vehicle to be operated and issued by the New York State Department of Motor Vehicles. 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 NOTE: Education beyond the secondary level 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.

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.