

GENESEE COUNTY

IT NETWORK ADMINISTRATOR

DISTINGUISHING FEATURES OF THE CLASS: The incumbent of this IT position carries with it responsibilities for designing the Genesee County computer network. Using influence, individual judgment and initiative. The incumbent is expected to be a team leader who plans and manages the design, implementation and maintenance of projects that may involve several department and agencies/ vendors and provides input. The work is done under the general supervision of the Director of IT and has a large leeway for decision making. Direction is given over those involved in projects, this may consist of small groups and teams. Does related work as required.

TYPICAL WORK ACTIVITIES:

Acts as the lead designer of the Genesee County computer network;
Responsible for network modification planning, implementing strategies and projects that optimize system functionality and future growth;
Trains employees on new systems;
Design, configure and implement wired and wireless networks;
Configure and maintain VPN, remote networks, VLANs, firewalls, routers, switches, wireless systems, network authentication and authorization, routing protocols, and network security implementations;
Ensure that high level designs and changes are implemented and fully tested in an isolated test environment before being deployed to production;
Maintain and periodically test network redundancy and high-availability failover;
Troubleshoot wired and wireless networks;
Measure, preserve, improve and analyze network uptime and performance;
Identify network anomalies and classify the potential network performance impact;
Maintain network baselines and review regularly to ensure performance and configurations reflect the baseline;
Maintain information and documentation regarding software and hardware for network infrastructure, applications and procedures, to include technical designs, physical and logical network diagrams and processes for completing tasks;
Configure, deploy and maintain servers/services including those critical to network operation (DNS, DHCP, NPS, Active Directory, etc);
Deploy and administer Windows and Linux based servers;
Configure, maintain and troubleshoot network services relating to both physical and virtual server architecture and client systems;
Plans and ensures the delivery of up-to date industry standard IT infrastructure services such as but not limited to e-mail, internet access, security including firewalls, filing, backup and printing;
Ensure that efficient monitoring and configuration is in place in order to follow compliance standards and include measures for Data Loss Preventions;
Coordinate the install of network equipment including Servers, PCs and Mobile devices;
Provide migration paths for update and upgrading unsupported equipment and services;
Support desktop and mobile device hardware, operation systems and software;
Assist in customer support function in investigating and resolving reported hardware, software and integration problems of a complex nature;
Monitor and review but not limited to firewall logs, NIDS/NIPS reports, whitelists, blacklists, ACLs to ensure that they reflect current standards, and they ensure that their configurations satisfy the pillars of the CIA triad;

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- Periodically conduct in-house vulnerability scans, and act as a liaison with outside agencies and organizations to conduct outsourced assessments in order to ensure that infrastructure in meeting the security needs of the organization;
- Work with departments to implement network solutions and resolve network related issues based on need, and ensure that all solutions follow the best practices and fit within current hardware, software and technology standards/requirements;
- Collaborate with agencies including other county departments, New York State agencies, municipalities and contracted IT vendors to design coordinate and implement IT solutions and ensure remote access provided to these organizations is secured and actively monitored;
- Develop and review RFQs, RFPs and bids identify and evaluate vendors and equipment for purchase of computers, peripherals, network equipment, software and security tools.

The above examples of duties are intended only as illustrations of various types of work performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES, AND/OR

PERSONAL CHARACTERISTICS: Thorough knowledge of local and wide area network administration; good knowledge of the jurisdiction's and governmental IT functions and administrative procedures; Thorough knowledge of applicable laws, rules and regulations governing the use of software, as well as judicial and administrative interpretation related to these; Good knowledge of security systems, and software that protects technological infrastructure and the principles and practices of computer programming and networking; ability to read and interpret instructions related to data coding and the execution of programs; ability to communicate effectively, both orally and in writing; ability to lead and work well in teams; ability to work effectively with vendors, users and the public; ability to resolve complex, ambiguous technical and user problems; ability to plan and manage larger projects; ability to develop longer-range directions in specific IT areas; good initiative, self-motivation and organizational skills and ability to learn new technology.

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to sit, use hands to finger, handle, or feel objects, tools or controls; and reach with hands and arms. The employee is regularly required to walk, talk and hear.

The employee must occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus.

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

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The noise level in the work environment is usually quiet.

MINIMUM QUALIFICATIONS:

EITHER:

- A. Possession of a Bachelor's Degree or higher in network engineering, management information systems, computer science, computer technology, computer programming, systems analysis, or related computer fields **AND** three (3) years of paid experience in design, maintenance, configuration or installation of large scale network systems, computer related project management, systems analysis and/or delivery of computerized management information systems, two years of which must have been in a lead role giving direction in projects;

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- B. Possession of an Associates' Degree in network engineering management, information systems, computer science, computer technology, computer programming, systems analysis, or related computer fields **AND** five (5) years of paid experience in design, maintenance, configuration or installation of large scale network systems, computer related project management, systems analysis and/or delivery of computerized management information systems, two years of which must have been in a lead role giving direction in projects;

OR

- C. Graduation from high school or possession of an appropriate equivalency diploma recognized by the NYS Department of Education **AND** seven (7) years of paid experience in design, maintenance, configuration or installation of large scale network systems, computer related project management, systems analysis and/or delivery of computerized management information systems, two years of which must have been in a lead role giving direction in projects;

OR

- D. An equivalent combination of education, experience and training as defined by the limits of above.

Note: Your degree must have been awarded by a college or university accredited by the regional, national, or specialized agency recognized as an accredited agency by the U.S. Department of Education/U.S. Secretary of Education. If your degree was awarded by and educational institution outside of 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.

All qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Competitive Class

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