

Position Title: Senior Network Engineer
Department: Information Services - Infrastructure
Location: Albany
Hiring Rate: \$75,683
Bargaining Unit: CSEA
Posting Date: September 3, 2021

Our Mission

We commit to deliver exceptional service and professional expertise on every financing and construction project for our clients and the public, in a cost-effective manner, while advancing the policy goals of New York State.

Applicant Instructions

To apply for this job opportunity:

[Click Here](#)

For further questions please contact: Human Resources

515 Broadway, Albany, NY 12207
518.257.3550 (fax)
Recruiting@DASNY.org (e-mail)

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Position Description

Position Title:	Senior Network Engineer
Grade/Classification:	5 (D1) – Professional II
Bargaining Unit:	CSEA
FLSA Status:	Exempt

Last Revised: August 25, 2021

Primary Purpose

The Senior Network Engineer supports the enterprise network that spans across multiple data centers and field offices in NY State. The Senior Network Engineer is responsible for designing, implementing and maintaining network infrastructure and resolving production issues.

Essential Functions

- Collaborate with information security, server & storage administration, application development, and application support teams to design and implement network infrastructure changes that satisfy security, performance, and business needs.
- Lead network projects and make recommendation on technology changes.
- Understand system interactions across the network and be able to work with the end user and other infrastructure and development teams to improve or resolve operational issues.
- Design, build, and support enterprise network upgrades. Implement and support network changes including routing and equipment upgrade / replacement.
- Support network penetration testing and security scans.
- Partner with information security to identify and remediate vulnerabilities in the network.
- Design and implement VOIP communication and Quality of Service configuration, working directly with the telephony group.
- Design and implement network access between DASNY offices, including the evaluation, selection and implementation of new network technologies where applicable.
- Configure and support current network technologies including ELAN, MPLS, Broadband and cellular networks connecting multiple offices.
- Analyze requirements, design, and implement wireless network solutions. Support and upgrade current wireless network configuration.
- Develop a schedule for and implement network firmware upgrade. Plan for and implement hardware replacement according to equipment lifecycles. Maintain hardware inventory and participate in infrastructure asset management and proper equipment disposal.
- Manage regular operational maintenance tasks such as applying patches to network equipment. Schedule and plan required system outages to create minimal disruption of systems for DASNY users.
- Troubleshoot and resolve complex production network issues. Coordinate with internet and network services providers to remediate issues.
- Perform in the capacity as a subject matter expert and resource in area of network, assisting other IS department staff and DASNY users with system knowledge and problem resolution.
- Monitor network performance metrics including bandwidth usage, throughput, latency, packet loss, availability, and connectivity. Implement proactive controls to minimize impact to business operations.
- Set baseline metrics for network performance.
- Design and implement enhancements and improvements to the enterprise network to support business needs.
- Maintain documentation on network architecture. Document all changes made to the network following the Change Control procedure.

Position Description

- Maintain hardware, software specifications, and vendor contact information.
- Plan for and implement field site network changes. Visit field offices to support network changes or setup new sites. Coordinate with service providers/vendors to implement internet service and cable new offices.
- Meet with lead field site personnel on a regular basis to discuss business needs and plan for approved changes.
- Perform feasibility studies and cost benefit analysis based on facts gathered about current or proposed network enhancements to address business needs.
- Provide technical expertise and leadership for staff and project teams. Mentor junior network engineers and provide technical assistance.
- Maintain current knowledge of industry standards and make recommendations for changes and/or updates to network architecture and equipment based on the organization's overall mission and strategic plan.
- Project and anticipate network equipment needs. Develop roadmaps for the technical resources and applications owned by DASNY. Manage the life cycle of network infrastructure.
- Assist in managing the budget for the purchase, maintenance, repair and replacement of network equipment on an ongoing basis.
- Participate in disaster recovery planning, testing and execution.
- Deliver outstanding customer service to on-site and remote users.

Other Duties and Responsibilities

- Provide advice to applications development, security, technical operations or end-user personnel relating to network scalability, security, and quality of service.
- Participate in the completion and follow up of requests for proposal; as needed, participate in the evaluation of responses, participate in vendor contract negotiations, and work with others responsible for contract development.
- Work closely with the Chief Information Security Officer to identify and apply appropriate security controls for user access to business information and submit updates to the disaster recovery plan when system changes occur.
- Maintain current knowledge of network hardware/software products and trends in the technology industry.
- Contribute to budget preparation, planning and management for the above functions.
- Assess, develop and implement internal controls, and oversee the review and testing of same.
- Assist Management in the development of policies.
- Develop, document and implement procedures.
- Undertake special assignments as directed.
- Must maintain regular attendance in accordance with DASNY attendance and leave policies.
- Must adhere to the NYS Information Security Policy Standards established and issued by the Office of Cyber Security and Critical Infrastructure Coordination. (Standards can be found on the Intranet and NY State ITS sites).

Supervision

Supervision of employees may be required.

Position Description

Physical/Mental/Visual Demands

Frequent travel is required, using public transportation, rental vehicle, DASNY vehicle or personal vehicle. This travel may include overnight stays at public accommodations and related establishments. This position requires complex and time-pressured decision-making and availability to work a modified work schedule or extended workday hours. May require physical mobility (movement from place to place) and exposure to heights (climbing ladders, scaffolding, etc.). Must be able to lift up to fifty pounds.

Work Environment

Standard office environment, including the use of one or more of the following: PC, telephone, fax machine, printer, copier, electronic stapler/hole punch/date stamp, shredder.

Minimum Qualifications

Technical School for Computer Networking Systems or Associates degree in Computer Science or related fields plus six years of relevant hands-on experience with: leading network architecture design that spans multiple locations, network performance & security management, MPLS support and ELAN configuration, network infrastructure maintenance.

- Professional experience with all aspects of the administration and monitoring of TCP/IP based LAN/WAN networks and their relational components required. Knowledge of VPN setup is required.
- Experience with network segmentation design and implementation.
- Experience with VOIP communication and Quality of Service configuration.
- Experience with wireless network design and implementation.
- Experience with identifying and remediating vulnerabilities in the network.
- Full working knowledge of all routing protocols and ACLs.

Other combinations of education and experience may be considered.

Preferred Qualifications

Bachelor's degree in Computer Science or a related field plus four years relevant hands-on experience with: distributed network management and cloud network systems

- Experience with Firewall, IPS and IDS configuration.
- Experience with VPN configuration.
- Experience with performing network penetration testing and analyzing the results.

Essential Skills

- Advanced knowledge of and skills working with network hardware and software.
- Ability to work independently and take greater responsibility for network support is critical to this position.
- Capability to analyze business and security needs, and design network solutions.
- Ability to troubleshoot complex issues related to DASNY's network including application and server interaction and system integration.
- Demonstrated analytical, conceptual and problem-solving skills.
- Excellent oral, written and listening communications skills, including the ability to relate technical information to non-technical people.
- Strong interpersonal skills.
- Demonstrated organizational skills and ability to prioritize.
- Demonstrated ability to read, understand and interpret technical and procedural manuals.