JOB TITLE: IT Network & Systems Engineer
REPORTS TO: Sr. Director of Engineering, Operations, IT & Facilities
FLSA STATUS: Full-time, Exempt
LOCATION: On-site, Duluth, MN

POSITION SUMMARY

It is the mission of PBS North/The North 103.3FM to inspire and enrich lives for a more vibrant and connected community. We fulfill this mission by offering multimedia platforms and creating programming with communities, providing opportunities to learn, connect, and engage.

To advance this work, PBS North/The North 103.3FM seeks an experienced IT Network & Systems Engineer to lead our enterprise IT and strengthen the foundation of our engineering team. Television and radio are increasingly built on IP networks, and this position bridges enterprise IT with modern broadcast engineering, supporting our business offices as well as our studio, production, transmission, and digital/streaming platforms.

As a member of the engineering team, this person serves as the organization's lead for networking, enterprise IT, and cybersecurity, helps the station adopt new technologies, including AI, where they make sense, and works alongside the team on broadcast systems. Broadcast experience is a plus but is not required; training on broadcast systems will be provided.

ESSENTIAL DUTIES

Networking & Infrastructure

- Design, configure, and maintain the organization's switched and routed networks, including VLANs, Layer 3 routing, and segmentation between broadcast and enterprise systems.
- Support IP-based media networks, including multicast and QoS for audio-over-IP and IP video, and help plan for emerging IP media technologies used in television and radio.
- Manage firewalls, VPNs, internet and external IP connections, and WAN links to remote transmitter sites.
- Monitor network health and performance and troubleshoot issues using monitoring and packet-capture tools.

Enterprise IT & Security

- Lead enterprise IT, including Microsoft 365, Active Directory/Entra ID, servers and virtualization (Windows, macOS, Linux), and end-user devices.
- Lead the organization's cybersecurity practices, including access control and multi-factor authentication, patching, endpoint protection, backups, and incident response, and support IT related compliance with FCC requirements for broadcast and EAS systems.
- Administer and support the VoIP phone system and related communications systems.

- Manage file storage, backup, and archive systems (SAN/NAS/LTO/cloud).
- Evaluate, deploy, and support AI tools and agents where they benefit the organization, such as workflow automation, staff productivity, and transcription and metadata for media archives, with attention to security, data privacy, cost, and responsible use. Help staff use these tools effectively.
- Provide technical support to staff, and help manage vendor relationships, software licensing, and IT assets.
- Develop and maintain IT policies (including guidelines for AI use), procedures, and network documentation, and cross-train team members so critical systems are not dependent on a single person.

Broadcast Engineering Team

- Work alongside the engineering team to install, maintain, and support studio, master control, production, radio, streaming, and transmission systems.
- Operate PBS North/The North 103.3FM operational equipment as needed.
- Advise the Sr. Director on equipment issues, upgrade opportunities, technology trends, and IT risk, and contribute to capital and operating budget planning.
- Must be available to respond to technology emergencies outside of regular working hours, including evenings and weekends, as required.
- Participation in the on-call rotation may be assigned based on operational needs, role responsibilities, and technical expertise.
- Perform other duties within the Engineering Department as assigned.

REQUIRED QUALIFICATIONS

- To qualify for this position, candidates must meet one of the following combinations of education and experience:
    - Associate degree in Computer Science, Information Technology, Computer Engineering, or a related field (Bachelor's preferred) and three (3) years of related experience; OR
    - A minimum of five (5) years of demonstrated experience in network administration, systems administration, or a comparable technical role.
- Hands-on experience configuring and troubleshooting enterprise network equipment, including switches, routers, firewalls, VLANs, and VPNs.
- Experience administering Windows environments, Microsoft 365, and Active Directory/Entra ID as well as Mac computers in this environment.
- Working knowledge of cybersecurity and data privacy best practices.
- Working understanding of current AI tools, including AI assistants and agents, and how to apply them practically and securely in an organization.
- Excellent troubleshooting and critical thinking skills.
- Excellent written and verbal communication skills.

- Strong customer service and relationship-management skills, with the ability to build trust, respond effectively to user needs, provide technical support in a collaborative and professional manner, explain technical issues to non-technical audiences and work effectively with staff, management, contractors, and vendors.
- Willingness and ability to learn new technologies, including broadcast systems.
- Valid driver's license issued in the United States is required.

PREFERRED QUALIFICATIONS

- Broadcast, media, or live production experience.
- Experience with multicast networking, audio-over-IP (e.g., Livewire, AES67, Dante), or IP video.
- Experience administering VoIP phone systems.
- Industry certifications such as CCNA, CompTIA Network+ or Security+, Microsoft, or SBE certification.
- Scripting and automation experience (e.g., Python, PowerShell, Bash).
- Hands-on experience deploying or integrating AI tools, agents, or automation platforms in an organizational setting.
- Experience with virtualization platforms (e.g., VMware, Hyper-V).

PHYSICAL REQUIREMENTS

- Ability to frequently sit, stand, walk, and work at a computer and standard office equipment for extended periods.
- Ability to lift, carry, and move equipment weighing up to 75 pounds.
- Ability to climb ladders and work in equipment racks, on rooftops, and in tight spaces.
- Occasional travel is required in all seasons and weather conditions.

TO APPLY

Interested parties should send a cover email, resume, and complete application in confidence to applicant@wdse.org. Applications can be downloaded on our Careers page of our website.

DSAETC is an equal employment opportunity employer. DSAETC does not discriminate against employees or applications on the basis of race, color, religion, gender, age, national origin, citizenship status, disability, medical condition, genetic predisposition or carrier status, military or veteran status, sexual orientation, gender identity, or expression, marital status or any other characteristic protected by applicable local, state or federal law.