



Network Engineer – Position Description

The Lonestar Education and Research Network (LEARN) is a consortium of 41 organizations throughout Texas that includes public and private institutions of higher education, community colleges, the National Weather Service, and K-12 public schools. The consortium, organized as a 501(c)(3), connects these organizations, and over 500+ affiliated organizations, together with high performance optical network services to support their research, education, healthcare and public service missions. LEARN provides Layer 1 and MPLS transport services. It also provides IP connectivity to a global research network through Internet2 and other networks, and commercial Internet services (CIS) to its members.

Position Location: This position requires the candidate to operate from a home office in a virtual office environment. Candidate location can be in the Dallas, Houston, Austin, or San Antonio Metroplexes or be willing to relocate to meet LEARN's location requirement.

Travel Requirements: Travel to LEARN POPs and member locations throughout the State of Texas regularly. Travel to events and meetings outside of Texas occasionally.

To apply for this job, please submit a cover letter and resume in PDF format to jobs@tx-learn.net

Responsibilities and Duties:

- Provide engineering and support services to LEARN customers and members. LEARN operates a high-speed Wide Area Network (WAN) and ISP environment consisting of circuits, multiplexers, routers, network switches and servers.
- Provide project planning, implementation and successful execution of projects including technical network design and develop detailed network documentation.
- Isolate and diagnose root causes of hardware and software issues and develop and carry out a plan of action for timely problem resolution.
- Design and implement advance configuration of network systems, routers, and switches.
- Design and implement advance configuration of network management tools and systems.
- Interact and collaborate with vendors and contractors for product/platform evaluation, technical implementation and planning, and procuring network products and services.
- Develop, implement, and maintain standard operational procedures and established standards.

The individual will work in a small team environment but will have significant interaction with members ranging from K-20, higher education and other networks. Frequent interaction with network, fiber & service providers, with other regional and national networks, with content & cloud providers, and with application & infrastructure providers.

Position Qualifications:

Required Qualifications:

- Bachelor's degree with minimum of 5 years of experience working directly with complex network environments or 10 years of professional experience in advance service provider network environment
- Demonstrated team building abilities
- Demonstrated record of taking initiative to solve technical and logistical issues
- Proven oral and written communication skills including the use of collaboration suite of tools.
- Proven experience with advance service provider and WAN router configurations utilizing logical systems, BGP in a multi-homed environment, IPv4, IPv6, ISIS, OSPF, MPLS, LACP, LDP, L2 and L3 VPN, VPLS, EVPN, QoS, 802.1q, 802.1p and IP Multicasting technologies
- A working knowledge of networking protocols, with a thorough understanding of TCP/IP, IPv4/v6 address management, and DNS
- Proven working experience with Juniper routers and switches is required.
- Proven experience with network management and monitoring systems (ex: PerfSonar, NetBox, LibreNMS, Rancid, etc.) and diagnostic tools commonly used within the service provider networks
- Linux or BSD system administration skills
- Fiber optic wiring and transceiver troubleshooting knowledge and operating network test equipment
- Proven project development & implementation skills; network documentation experience and skills

Preferred Qualifications:

- Knowledge of fiber optic technologies and Layer1 protocols & technologies
- Hands-on experience with virtualization technologies e.g. VMware
- Juniper and Cisco certifications
- Familiarity with co-location and Internet Exchange point practices and policies
- Prior experience working with R&E networks

Work Conditions:

- On-call availability for resolving network emergencies, both during regular and off-hours.
- Emergency on-call availability 24x7x365
- Sitting for extended periods of time
- Driving among POP and member locations would be required; e.g. 6+ hour drive to West Texas POP or member site.
- Dexterity of hands and fingers to operate a computer keyboard, mouse, power tools, and to handle other computer components
- Lifting and transporting of moderately heavy objects, such as network switches, computers, and peripherals