

Job Description: Broadband Network Engineer I**Reports to:** Director of Operations**Date:** 9-1-11

Packerland Broadband is the third largest Cable TV Operator in Wisconsin, providing business and residential customers in Wisconsin and Michigan's Upper Peninsula with a full suite of 21st Century Broadband technology solutions, products and services including Advanced Analog, Digital and High Definition Cable TV, High-Speed Internet Access, VoIP & Wireless Digital Telephone, Point-to-Point Transport Circuits, and Long-Haul Fiber Services.

Packerland Broadband is always looking for dynamic individuals who like challenge and an opportunity for personal growth and success. Packerland Broadband employees take great pride in their company and are fully engaged in our philosophy of improving customer lives by connecting people through innovative communications systems.

POSITION

Packerland Broadband is currently seeking a **Broadband Network Engineer I** as a part of the Advanced Broadband Services team in Iron Mountain, MI.

COMPENSATION AND TIME REQUIREMENT

Salary Position, wage based on experience. 40 – 60 hrs. per week. On-Call Compensation

JOB SUMMARY

The successful candidate will be responsible for assisting the Packerland team in broadband network planning, design, and architecture development; network and systems installation, troubleshooting and testing; and in working with the team in the installation and maintenance of all of Packerland Broadband's customers, networks and lines of business.

ESSENTIAL FUNCTIONS OF THE POSITION

- Actively and consistently support all efforts to simplify and enhance the customer experience.
- Provide local and on-site network maintenance, troubleshooting, engineering and support services; repair and modify video, voice and data network equipment for our organization and customers. Provide escalated tier support across organizations and to third party vendors.
- Handle trouble tickets and calls, responsible for triage, escalation, and resolution of network troubles. Respond to equipment failures, trouble shoot and repair equipment while providing co-workers and customers with productive and timely communications throughout the repair process
- Validate problem descriptions and perform detailed problem diagnosis; track and update problems in trouble ticketing system. Facilitate and resolve escalated trouble calls and work closely with engineering, field technicians, and third party vendors to diagnose, correct and resolve service related issues.
- Take appropriate action to monitor and maintain service level agreements. Perform basic network operations functions such as monitoring information on all sites and circuits, identify deterioration of components and dispatch and assist various field personnel with repairs.
- Work on projects/systems/issues of all complexities surrounding network maintenance, planning, configuration and network and equipment optimization.
- Assist NOC Tiered Support, TAC and field personnel with troubleshooting, support and maintenance of network elements and connections required to support Packerland's revenue generating networks.
- Assist in network architecture design and engineering. Troubleshoot communication architectures, topologies, hardware, software, transmission and signaling links and protocols. Integrate and schematically depict these items into complete network configurations.
- Assist in the development and documentation of technical standards and procedures. Implement approved methods of Standard Operating Procedure (SOP).
- Assist in the development and documentation of technical standards. Assist in the development and evaluations of new products, services and procedures.
- Provide timely and accurate reports for analysis of the network and Network Monitoring System. Monitor traffic patterns to identify potential problem areas and take proactive corrective action to implement optimizations and adjustments; refer chronic problems to Engineering for permanent resolution
- Detect and verify alarms when needed; identify alarm correlations and appropriate response actions. Identify areas for future alarm automation and early detection.
- Maintain awareness of network activities affecting local elements.
- Technical administrator for billing systems and other software and hardware systems as assigned.
- Intranet site development as assigned.

- Provide technical sales support for staff and customers.
- Make recommendations for continuous quality improvement.
- Help plan and meet project deadlines. Assist in budget management and planning.
- Actively participate in team meetings. Work on projects as a project team member or as a project team lead, help coach less experienced staff.
- Submit and execute Change Management Requests
- Adhere to industry specific local, state, and federal regulations and laws, as applicable.
- Know, understand and follow company policy.
- Perform other duties as requested by supervisor.

JOB REQUIREMENTS

- Understanding of CATV, Digital CATV, Internet, VoIP Telephone and Broadband Technologies and Systems
- Understanding of IP networking and routing fundamentals (emphasis on Cisco products and design methodologies)
- Knowledge of Hybrid Fiber Coax and DOCSIS/CMTS
- Knowledge of phone technologies (IP Telephony, Voice Over IP)
- Knowledge of hardware, network operating systems and troubleshooting skills
- Knowledge in local and wide area networking
- Knowledge of tunneling technologies such as VPN's
- Knowledge in security systems, features, methods and architecture
- Knowledge of Switching and Routing Architectures
- Knowledge of support systems for network management and element management systems
- Knowledge of Ethernet and wireless technologies
- Knowledge of network operations tools
- Knowledge of server, desktop and email management
- Ability to perform reasonable on-call duties as assigned
- Ability to obtain adequate transportation to and from Iron Mountain office in all types of weather conditions
- Ability to work with internal/external clients, various operation support groups, vendors, carriers and utilize all network tools and resources to resolve the majority of troubles
- Ability to develop, analyze and support various network designs, architectures, protocols, topologies, configurations and provisioning platforms
- Ability to provide continuous evaluation of the company's network infrastructure and initiate expansion or remediation projects to support growth and mitigate risks
- Ability to complete technical self-study courses to enhance knowledgebase on an on-going basis

PREFERRED QUALIFICATIONS, KNOWLEDGE, SKILLS AND ABILITIES

- Ability to work in a team environment
- Ability to be prompt and exercise proper personal and time management
- Ability to be responsive to user needs and display a courteous demeanor
- Ability to take ownership of a problem and follow through with a solution
- Ability to work in a customer environment and present oneself in a professional manner
- Ability to read, write and speak the English language to communicate with employees, customers, suppliers, in person, on the phone, and by written communications in a clear, straight-forward, and professional manner
- Ability to use the following hand tools: electric drills, hammers, wrenches, screwdrivers
- Ability to walk over all types of terrain in all kinds of weather while carrying tools and equipment
- Ability to accurately measure distances, using tapes or other measuring devices
- Ability to carry, climb and operate and extension ladder
- Ability to differentiate between different sizes and colors of wires and cables
- Ability to make cable connections in tight spaces by bending, reaching, twisting
- Ability to operate appropriate computer or test equipment associated with position (e.g. signal level meters, ohm meters, etc.)
- Ability to perform job from high places
- Ability to work while standing 50 - 70% of the time
- Ability to work with small components and wires to make cable connections
- Ability to use handheld communication devices and applications
- Ability to use personal computer and software applications
- Knowledge of company products and services

EDUCATION

- Bachelor's Degree, Technical Institute degree or certificate in Computer Science, Network Management, Information Systems, equivalent military experience or other related field or equivalent work experience
- Professional level certification or equivalent work experience; CCNA or willingness to work towards completion of
- Industry and vendor specific certifications and training

RELATED WORK EXPERIENCE

- 3 to 5+ years of Network systems and hardware implementation, repair and support experience

CERTIFICATIONS AND LICENSES

- Valid driver's license with satisfactory driving record within Company required standards

WORKING CONDITIONS

- Work may be performed indoors or outdoors at all times of the day or night
- Office Environment
 - May work in:
 - Network Lab environment
 - 24X7 Network Operations environment
- Field Operations environment
 - May work in:
 - Indoors in confined space, poorly ventilated areas such as attics, basements and/or crawl spaces
 - Limited exposure to dust, dirt, insects, rodents, pets, and cleaning solutions
 - Exposure to continuous moderate noise
 - Outdoors in all kinds of weather and at all times of the day or night
 - Near power lines and electricity
 - At various heights above ground
- Travel
 - Occasional travel as required
 - May work and travel in inclement weather

Statement of Packerland Broadband Division Values

- 1. We Exercise Integrity**
 - **Always be honest** – *We exercise personal and company integrity at all times*
- 2. We Take Care of Each Other**
 - **We are a team** – *We deserve each other's respect and courtesy*
- 3. We Take Care of Our Customers**
 - **Our customers pay the company bills and our paychecks** - *They deserve the best service and attention*
- 4. We Exercise Fiscal Responsibility**
 - **Our company must be profitable to best serve our customers** – *This allows us to remain in business and to pay our shareholders – US!*
- 5. We Have a Bias for Action**
 - **We are “proactive!”** – *We think strategically and execute quickly - the faster we take action and the faster we execute, the more quickly we will deliver innovation, results and growth in both our personal and professional lives*
- 6. Be Safe, Stay Healthy & Have Fun!**
 - **Take care of yourself and take time to Celebrate!**