Network Engineer-81639
Organization:
:NE-NERSC
Description

Berkeley Lab is Bringing Science Solutions to the World, and YOU can be a part of it!

In the world of science, Lawrence Berkeley National Laboratory (Berkeley Lab) is synonymous with "excellence." That's why we hire the best - whether in research, finance or other operations. This is a great opportunity to bring your top-notch skills to bear in support of world-class scientific research that addresses national and global challenges!

POSITION SUMMARY:
Lawrence Berkeley National Lab (Berkeley Lab), a pioneer in research and science, has an immediate opening for a Network Systems Administrator (Computer Systems Engineer 2) within NERSC, the National Energy Research Scientific Computing Center, to provide a variety of engineering support services 24x7 for ESnet, the Energy Sciences Network, a high-speed network serving thousands of Department of Energy scientists and collaborators, and a worldwide leader in developing and operating high-performance network services. ESnet provides DOE scientists with comprehensive connectivity to the global Internet and high-bandwidth access to DOE sites and primary science collaborators, including research and education (R&E) networks in the US, Europe, Asia Pacific, and elsewhere.

In this key role, you will work for the Operations Technology Group and serve as the primary point-of-contact between ESnet engineers and vendors to provide initial network diagnoses and early problem resolution. This role will provide content to manage new workflow processes, will create new SOPs, create new network diagnostic tools and coordinate or provide training for the technicians. This role will serve as the liaison between ESnet and NERSC and will be part of the on-call rotation.

WHAT YOU WILL DO:
- Assist in network diagnoses and design appropriate testing routines or scripts; may conduct more complex testing to meet specified requirements to bring the wide area network back to a normal state.
- Provide centralized monitoring and responses using systems monitoring tools (i.e. Nagios, Spectrum, Splunk, syslog).
- Provides primary, diagnostic incident response, initial level triage of networking issues, dispatch, escalation and coordination of communication to ESnet users and must be able to apply their understanding of network design, familiarity with configuration and installation of various network equipment like routers, switches and firewalls from a variety of vendors like Cisco, Juniper, Alcatel, etc.
- Assists in the design, implementation and maintenance on more complex LAN and WAN Systems in accordance with specified requirements.
- Analyzes data network documentation and communicates to management regarding the current operational status of networks.
- Perform as one member of a 24/7 on-call network response team.
- Work with Cybersecurity team to assist in managing, maintaining and configuring ACLs and firewalls.
- Perform routine engineering tasks, such as power cycling remote hosts, updating software, applying security patches and inventory control, etc.

Support of OTG
- Be on call, on a rotating 24/7 basis for OTG related matters as an escalation contact for OTG technician staff to provide primary level support for networking, systems, storage, and environmental issues prior to calling the specific group POC. This position is the first point of escalation prior to contacting the group POC on both the NERSC and ESnet systems.
- Escalate issues when necessary to the appropriate project lead and/or the appropriate management.
• Update documentation as new processes or procedures are implemented.

WHAT IS REQUIRED:
• Bachelor's degree in engineering, computer science, management information systems, or related field preferred or equivalent combination of education and experience and a minimum of 4 years of related experience. Two or more years of experience should be in data networks.
• Experience working with network systems and networking principles best practices.
• Experience working with network software and hardware (e.g. Cisco IOS)
• Experience working with proprietary software and hardware.
• Understands IPv4 and IPv6 protocols.
• Experience with Unix/Linux environments; systems administration and programming
• Strong written and verbal communications
• Strong Layer 1 experience, familiarity with Ixia, SmartBits or other fiber plant testing hardware. Experience with physical cabling in a raised-floor environment, cable/fiber management (testing, troubleshooting, etc.)
• An understanding of layer-2 and layer-3 protocols (e.g. STP, OSPF, BGP)
• Strong understanding of TCP/IP networking environments.
• Ability to convey a strong presence, professional image, and deal confidently with complex technical problems
• Good communication and interpersonal skills to interact with team members and support personnel
• Ability to anticipate problems, resolve ambiguity and take decisive action
• Must be able to lift 40 lbs, enter and work under a 3 or 4 foot raised floor, use required PPE (Personal Protective Equipment), and follow visual and audible safety indicators.

Additional desired qualifications:
• Ability to work independently and as part of a team
• Good network performance modeling or benchmarking skills using tools such as 'iperf', 'ndt', 'owamp'
• Experience with network security: configuring/maintaining ACLs, knowledge of firewalls
• Understanding of network architecture and support. This includes design, planning, documentation, integration and operational maintenance

NOTES: This is a career appointment.

This position requires completion of a background check.

Berkeley Lab addresses the world's most urgent scientific challenges by advancing sustainable energy, protecting human health, creating new materials, and revealing the origin and fate of the universe. Founded in 1931, Berkeley Lab’s scientific expertise has been recognized with 13 Nobel prizes. The University of California manages Berkeley Lab for the U.S. Department of Energy's Office of Science.

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