

### Job Title

Lead of Infrastructure Operations and Networking

### Location

- Cambridge, MA (3 of 5 days onsite)
- Occasional travel to data center location Holyoke, MA, probably every other week

### Position Type

Full-time

### Job Summary

The Lead of Infrastructure Operations and Networking will serve MIT's Office for Research Computing and Data (ORCD) under the Platforms, Infrastructure and Data Services team, supporting MIT's research computing community. The role requires a strong technical background, with hands-on experience in managing data center operations. The ideal candidate understands the data center operations and networking process from architecture and design; maintenance and improvements of existing server rack and network infrastructure; and retiring end-of-life equipment. The incumbent will manage over one hundred server racks located at the Massachusetts Green High Performance Computing Center (MGHPCC) and its supporting network infrastructure (InfiniBand and Ethernet).

### Key Responsibilities

#### Support/Operations (50%):

- Manages support and maintenance of the existing rack and network infrastructure
- Oversees troubleshooting and prioritization of complex network issues in coordination with internal teams and vendors
- Ensures the availability and performance of the rack and network infrastructure
- Plans and oversees the deployment and configuration of infrastructure equipment at the data center in collaboration with internal teams and vendors
- Recommends and implements technology strategies, standards and operating procedures.
- Manages tracking of equipment replacement, warranties, and asset tags
- Prepares regular reports on network, rack, cooling, and power capacity
- Ensures appropriate vendor contracts are in place, and ensures that vendors perform as per SLAs

#### Engineering (30%):

- Collaborates with internal teams and vendors to redesign and upgrade network architecture to support future needs, performance, fast recovery, and resilience
- Implements monitoring of our network infrastructure, reviews performance metrics, and oversees improvements

#### Projects and Development (20%):

- Manages IT projects and oversees implementation of new rack and network infrastructure technology
- Analyzes trends in infrastructure and networking technology, assesses the impact of emerging technologies, and develops new solutions with the team

#### Required

##### Education

- Bachelor's degree in computer science, bioinformatics, or a related field

##### Experience

- 7+ years experience in datacenter operations (racking and cabling) and in managing Ethernet and InfiniBand networks with a focus on HPC infrastructure
- Advanced experience with NAT, VLANs, subnets, DNS, DHCP, subnet manager
- Comfortable working with wiki and ticketing tools such as Confluence, Jira, ServiceNow or equivalent
- Ability to communicate and collaborate effectively with both technical teams and non-technical clients and partners

#### Preferred

- 3+ years experience within an HPC/research computing environment
- Has worked with and managed Dell ethernet network equipment
- Ability to analyze network traffic to identify technical issues and suspicious activities
- Can compile and troubleshoot Linux source code and packages
- Knowledge of network services related to public Cloud such as Direct Connect, CloudFront or VPC
- Experience working in environments that utilize service management frameworks (such as ITIL)

This is a full-time (40 hours per week) position. A hybrid schedule, with both remote and on-campus work, is available, with a minimum of three days each week on-campus.

Employment is contingent upon the completion of a satisfactory background check.

To apply, [view the Office of Research Computing and Data Lead of Infrastructure Operations and Networking posting](#) (Job Number: 23897) on [MIT's job application portal](#).