

Network Specialist
Salary: \$57,000 to \$72,000 per year
Closing Date: October 17, 2008

Major Responsibilities

The Canadian Advanced Network For Astronomical Research (CANFAR) is a new project which will develop an infrastructure to support the processing, storage, data management, and workflow management needs of large Canadian astronomical surveys. The CANFAR infrastructure will also allow astronomers to transparently access the resources of the Canadian Grid infrastructure.

The CANFAR infrastructure will be integrated into an existing environment which includes Canadian astronomers; Canadian astronomy surveys; the telescope facilities in Hawaii which observe and distribute data; the science data archives at the National Research Council's Canadian Astronomy Data Centre (CADC); and the Canadian Grid infrastructure. All collaborators within Canada are connected to CANARIE's CANET*4 research network through the local ORANs (e.g. BCNet).

The CANFAR team consists of a UVic-hired infrastructure development team, the CADC, and a small group of survey projects. The technical work will be primarily based at the CADC. The Network Specialist will work closely with network administrators at the institutions that form the CANFAR infrastructure, including CANARIE and the local ORANs to analyze, monitor, and improve the network quality of service and bandwidth achieved at each CANFAR site.

Organizational Structure

The successful applicant will work closely with the network administrator at the Herzberg Institute of Astrophysics, and will report to the CADC Operations Manager. The Network Specialist will be under the direct supervision of the CANFAR project Principal Investigator. Additionally, the incumbent will be required to work at both the UVic and HIA sites (12km separation).

Key Activities

- Assists in, and eventually coordinates, the effort to improve the network throughput among the CANFAR infrastructure sites
- Analyzes and monitors the network quality of service and bandwidth achieved between the CADC and each CANFAR infrastructure site.
- Works with the network administrators at each CANFAR partner site, CANARIE, and ORANs to establish common monitoring infrastructure.
- Reports on progress of network analysis and improvement to the CANFAR participants.

Educational Requirements

A bachelor's degree in computer science, computer engineering, or a related discipline.

Experience Requirements

Demonstrated excellence in communication and collaborative skills.

Three or more years as a network administrator with equivalent experience in monitoring, analyzing, and troubleshooting the physical and logical structure of local-area and wide-area networks.

Experience with maintaining high-performance networks (gigabit), especially over a wide-area network, would be a considerable asset.

Knowledge Requirements

Expert knowledge of a wide range of tools for monitoring, analyzing, and troubleshooting networks (including, but not limited to, traceroute, iperf, NDT). Applicants must be able to demonstrate use of such tools.

Considerable knowledge of host OS network performance tuning for Linux-based systems. Similar knowledge of Solaris and other UNIX-based OSes would be considered major assets.

Advanced knowledge of Cisco IOS and router technology, configuration, and performance tuning.

Contact

Address any enquires to:

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Applying

A résumé and accompanying cover letter (in MSWord, openoffice, or PDF format) should be sent directly to the contact person. Applications with no cover letters will **not** be considered. Applications must be received no later than the closing date indicated above. In reply please quote the appropriate job title.