

Network Administration

Information Systems & Technology (IST) assumed responsibility for network management within the Faculty of Engineering November 1, 2010. IST assumed responsibility for network management within the remaining areas of campus January 1, 2011.

Several faculties currently manage and fund much of the networking infrastructure within their respective areas. This document describes a network management model where IST would be willing to assume overall responsibility for managing the network in such areas after discussion with stakeholders. A proposed timeline is given, for consideration by Faculty IT groups and management.

In the proposed model, IST would be responsible for funding of the network infrastructure, both for incremental expansion, and periodic renewal during campus wide network upgrade initiatives, subject to:

- Time and materials charges for new network drops, for work performed by IST.
- Funding for new buildings and major renovations to continue to be funded through building project costs.

The following activities can be delegated to the Faculty IT department, to support local activities, as efficiently as possible:

- Creation, deletion, and maintenance of domain names, for end user devices (through IST provided *Maintain* package)
- Setting/changing of switch port speeds, duplexes, descriptions, and vlans (through IST provided *ona* package)
- Installation, maintenance, removal of network cabling and related components (subject to adherence to [Network Administration Guidelines](https://uwaterloo.ca/information-systems-technology/about/organizational-structure/technology-integrated-services-tis/network-services-resources/network-administration-guidelines) (<https://uwaterloo.ca/information-systems-technology/about/organizational-structure/technology-integrated-services-tis/network-services-resources/network-administration-guidelines>) and Policy 22 (<https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-22>))

Faculty IT staff would retain console access to local routers and switches, for the purposes of read-only activities such as diagnostics and troubleshooting of end user device network problems.

All other network operations activities would be performed by IST Network Services.

Transition Timetable

To avoid disruption in service, IST network management would be phased in over a 2-month period. An example timeline is as follows:

November 1, 2010	<ul style="list-style-type: none"><input type="checkbox"/> IST would assume authority for the architecture and design of network technical infrastructure, and authority for network device configuration, within the Faculty.<input type="checkbox"/> Local IT staff would continue to perform service provisioning functions, and repair/replacement of failed components, using current practices.
November 1 to December 31, 2010	<ul style="list-style-type: none"><input type="checkbox"/> IST would review network technical infrastructure within the Faculty, including locations of equipment, keys required, state of UPS's, device configurations, device firmware levels, etc.<input type="checkbox"/> IST would begin process of any standardization and rationalization needed. Any required equipment upgrades would be at IST expense
January 1, 2011	<ul style="list-style-type: none"><input type="checkbox"/> IST would assume overall responsibility for managing the network within the Faculty, including monitoring, and repair/replacement of failed equipment.

Monitoring and Response

IST Network Services staff are on call 24/7 to respond to afterhours equipment failures. On-call staff are paid an annual stipend, plus overtime for afterhours response. Campus Network Advisory Group members, IST management, UW Police, and Plant Operations, have the on-call pager number. Overnight response is at the discretion of the Director, Network Services. Network Services staff are onsite 7:00 a.m. to 4:30 p.m. Monday to Friday.

All equipment and services are monitored, and email alerts generated in response to failed equipment or service interruptions. These email alerts do not automatically call the on-call pager, at this time. However, fully automated pager notification for specific major equipment/service failures (e.g., core routers, DNS) is under development. The Director Network Services checks e-mail for alerts 7:00 a.m. and 9:00 p.m., 365 days a year, and calls the on-call staff, if they have not already responded.

Because IST has monitoring and processes in place, IST will generally be aware of equipment failures, and is able to respond quickly. If IT staff or users wish to report a service outage, and/or confirm a response is in progress, they may submit a ticket to IST's request tracker or contact the IST Service Desk at 519-888-4567 ext. 44357. They are also welcome to call the Director of Network Services at ext. 48043, or Director of Client Services at ext. 41135.

Major outages are posted to <https://uwaterloo.ca/information-systems-technology/network-service-alerts> on the IST website.