Incident Report - October 21, 2016
Incident #2016-169
Degraded Campus Internet Service

Summary
Queen’s Internet service was degraded due to a failure of one of the redundant Internet Service Provider’s (ISP) links and a false bandwidth cap on the second link from Monday, October 17, 2016 at 11:37 pm until Tuesday, October 18, 2016 at 6:24 am.

Impact
The outage to this Internet link forced the redundant link to handle all of campus Internet traffic. On-campus access to the Internet was degraded due to a false bandwidth limit at the ISP end of the redundant link. As well, there were reports of no access from off-campus Cogeco clients.

Root Cause
The root cause of the service interruption was an issue between the ISP’s hardware and the university’s network. The root cause of the false bandwidth limit on the Cogeco link and denied external access for the Cogeco clients is still being investigated.

Resolution
Our network interface was restarted Tuesday morning (October 18) at approximately 6:30 am, thereby allowing successful establishment of network communication with the primary ISP.

Communications (Internal)
The network monitoring tool, SERMON, notified ITS pager staff of the pending internet outage at 11:47 pm. Pager staff initiated the call-in process. Network staff engaged at 6:45 am.

ITSPP Communications (External)
A general notification to the ITS-L mailing list and Twitter was posted at 12:49 pm October 17 for the issue.
Lessons Learned

There is a need to investigate better monitoring of these ISPs.

Action Items

- Follow up with ISP (Orion) to make sure they contact the appropriate people in ITS to initiate support when an outage occurs, and review the incident to determine more fully what else could be done to prevent a reoccurrence.

- Determine the root cause for the false bandwidth limit by Cogeco and investigate whether the denied external access for Cogeco clients was a result of this.

- Review best effort call-in procedures for network support in off hours to see if improvements can be made.