Incident Report - Sept 13, 2017
Incident #2017-218
Email timeout on Barracuda Spam Filters

Summary
From Monday August 14, 2017 to Thursday August 17, 2017 the Barracuda Spam filters (which are used as an email gateway) stopped some emails from being delivered and delayed the sending of emails from automated systems and scanners on campus. The Barracudas were not responding quickly enough to other email systems trying to send email through the on-campus relay. In some cases, the email system gave up trying to communicate, and the email was lost.

Impact
Applications on campus that send emails through the Barracuda mail gateway – mailgw.queensu.ca - were affected by this incident. Some applications are capable of queueing email and retrying, in which case messages were delayed but ultimately delivered. Other applications cannot handle errors or delays, so these emails dropped with no notice to the systems administrators or end users.

Multifunction printers on campus also experienced errors scanning to email during this time.

Root Cause
The root cause was a 30-second latency fault on the Barracuda servers.

Resolution
Rebooting of the Barracuda appliances fixed the issue. Barracuda support was contacted at the time of the incident, and there was no other solution or mitigation.

Communications (Internal)
ITS staff communicated internally in face-to-face meetings as well as by telephone.

ITSSPP Communications (External)
ITS posted a notice as soon as the issue was determined to involve the email system. Individuals who reported incidents via iTrack were also contacted. When the issue was resolved, the notice was updated.

**Lessons Learned**

The Barracudas can have delays on them due to system faults or due to true latency caused by volume of email. Systems that are sensitive to email delays and are unable to recover and resend email should either be given a new service option of an application relay server (non-barracuda) or install local mail relay systems on individual application servers (not ideal).

**Action Items**

The Infrastructure group is currently investigating the replacement of the Barracuda Mail Gateway servers. This may include a specialized mail relay for application servers to utilize on campus.