

Incident Report - February 1, 2016

Incident #2016-129

DNS Resolving Issue

Summary

On February 1, 2016, the ITS Support Centre started receiving reports of inconsistent access to off-campus Internet resources. Upon investigation, it was found that one of Queen's two name resolution servers was not responding with correct answers to off-campus resources.

A name resolution server is responsible for providing the location of Internet resources such as mail and websites to users.

Impact

Internet users on campus could not consistently reach off-campus Internet resources for the duration of the outage. One of two campus name resolution servers would not provide Internet addresses giving users a fifty percent chance to reach their desired destination.

Root Cause

One of two campus name resolution servers would not provide Internet addresses. The cause was not identified.

Resolution

Restarting the service solved the problem.

Communications (Internal)

The networks team was contacted by the ITS Support Centre. The networks team, in turn contacted Infrastructure Systems and Storage (the service owner) to investigate the problem.

Communications (External)

A public notification was posted once the problem was realized. An update was posted once the problem was resolved.

Lessons Learned

- The name resolution service on one of our main servers is becoming unreliable.
- A periodic service restart that would clear the problem is forming that prevents resolution.
- Core name resolution services need to be moved off our old infrastructure.

Action Items

- The service will be restarted weekly on the affected name resolution server
- The server is to be retired and the service will be moved to a more reliable provider.