

## Incident Report - March 17, 2016

Incident #2016-138

### *Solaris Cluster Reboot*

#### Summary

On the morning of Thursday, March 17, 2016, a number of services hosted by the ITS legacy services environment became unavailable. The servers providing the hosting had suffered an operating system fault, causing a restart. The services were unavailable for approximately 20 minutes.

#### Impact

A number of services were unavailable for approximately 20 minutes.

- Main Queen's website (www.queensu.ca and all sub-websites including VHost and PHP Webapp)
- Post
- UD Maint
- EServices (Development, Preview and Production)
- QCat Library Search
- Event Calendar
- Listserv

#### Root Cause

The legacy services cluster uses a single network interface for cluster communication. During a maintenance process on the underlying network, one of the cluster nodes lost network connection. As a result, the operating system faulted, causing a reboot. This fault cascaded through the other servers in the cluster, causing them to reboot.

#### Resolution

Once the cluster of servers rebooted, the contained environments restarted and services returned. No lasting negative effects were found.

#### Communications (Internal)

All service owners were directly contacted. They were told of the situation and asked to test their services and report any problems. Some EServices applications needed attention.

## ITSP Communications (External)

A general notification was posted after the fact so that campus was aware of the outage.

## Lessons Learned

Cluster servers are sensitive to network interruptions.

## Action Items

Systems is working with Networks to find a network configuration that will avoid this problem in the future. Options include:

- Separate server management network from the cluster interconnections
- Disabling the network switch option that caused the cascade
- Removing the legacy environment from the cluster
- Shut down connected cluster nodes during expected network maintenance