Incident Report – June 9, 2016

Incident #2016-152

Disruption on Multiple Services

Summary

During a systems maintenance window on Thursday June 9, 2016 (at approximately 6:30 am), work began to move a SAN storage switch in accordance to a pre-approved change control.

System notification messages were received a half hour into the switch change indicating that there was a possible storage system problem within the VMware environment. Within the following hour, the first service generated a page and the IT Support Centre called to report slowness with many applications.

During the outage, the Systems team worked to isolate and resolve the problem. A ticket was opened with VMware since only VMware servers appeared to be affected.

The cause for the degradation could not be isolated so the fall back plan was activated to revert back to last known production state. Service was fully restored at 11:20 am.

Impact

All services in VMware experienced storage latency (slowness) for roughly three hours, which in turn caused several servers to exhibit server performance problems. Services affected by the outage included:

- Moodle
- Queen's Portal (LifeRay)
- Wiki
- PeopleSoft

Root Cause

The issue is currently still under investigation but there appears to be a speed incompatibility between new switch and old switch. ITS is currently working with our vendors to verify.

Resolution

Instituted fall back plan to revert to last known production state.

Communications (Internal)

The ITS Systems Team was in constant communication with the ITS Networks Team via Skype for Business and in-person when the issue was identified, and until the roll back plan was completed and the servers restored.

ITSPP Communications (External)

Notices were posted through the ITS Notification Tool including the ITS Twitter feed alerting campus of the degradation of services, updates to the issue, and notification of restoration of service.

Lessons Learned

VMware seems especially sensitive to brief storage interruptions so further testing is required.

Roll-back strategies need to be improved and more exhaustive testing completed.

Fibre cables must be cleaned every time they are disconnected from their ports for reliability.

Action Items

Continue working with vendor on the inter-operability of the new 8G SAN switches with the SAN storage and VMWare systems.

More testing to be done before switch moved again.

Refine roll back plan.