Outage Report
Telehouse-north0.core
Report Date: 25th January 2010
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Introduction:

This document is to serve as a explanation of the outage and subsequent network conditions experienced with the telehouse-north0.core router between Friday, January 22nd at 13:00 and Saturday, January 23rd at 22:05.

Details of fault:

At approximately 13:00 on Friday afternoon, the telehouse-north0.core router suddenly began to exhibit unexpected and unusual behaviour, such as intermittently losing adjacency to other routers within the network.

Although we cannot be certain at this point in time we believe that this problem may be related to difficulties experienced during the maintenance work which was carried out that morning.

During the IOS upgrade, our engineers had experienced difficulty having the router boot up with the intended IOS in place. As a result of this, our engineers had to revert back to another IOS but one which was still an improvement over the original.

We believe that this difficulty may have caused the router to enter an unstable state, which eventually culminated in the symptoms exhibited at 13:00 and the subsequent network incident. Please note however that the router gave no indications of problems in the subsequent monitoring, hence the maintenance was considered a success.

At approximately 13:15, the router was rebooted via out of band connectivity, and further investigations into this situation continued. After the reboot, router operation appeared to have been stabilised, however given the nature of the problem and the events leading up to this failure the situation was considered ongoing.

In order to eliminate a possible problem with the IOS which was currently in place on the router, local engineering resources were tasked and dispatched with the task of rebooting the router, after the intended IOS from that morning's maintenance was pre-loaded onto the router. Traffic was rerouted across alternative paths where possible. This reboot took place at 15:55.

Once this reload was completed, the router appeared to be operational and behaving as expected. Traffic was slowly routed back through this router with the goal of restoring network resilience which relies upon this router. Network resiliency was restored at approximately 18:20 that evening.

The router was closely monitored for any unusual behaviour over the following day and after the router displayed no ill effects, all traffic was rerouted back across their optimal paths.

We apologise for the inconvenience caused by this incident and would like to assure customers that we are doing our upmost to identify the cause of the initial difficulties, in order for us to be able to take preventative measures in the future.