Incident Report

DSL connection issues – 22nd March 2013

25th March 2013
Version 1.0

Introduction:

A proportion of our customer base, including those that take L2TP based DSL services from us, suffered a number of connection drops on Friday 22nd March 2013. This report is to provide details of the cause of the drops and to give further information about the actions taken to resolve the issue.

Breakdown of the events:

At approximately 10.05hrs our monitoring systems indicated that a proportion of DSL users had been disconnected from our service. In addition some leased line services may have noticed a small issue as traffic rerouted around the network. Our engineers began to look into the issue, but could see that the vast majority of connections had already restored and that there was no obvious reason for the drop. Further investigative work continued to identify the reason for the problem and to plan any corrective action that would be required.

In addition to the investigations within Entanet, we also began to receive reports of failures with other providers, so we also began to look into whether the issue was related to a carrier level issue. This proved to be false information.

We identified a line card within our Telehouse East Core infrastructure that had reset. Our focus was to understand the reason for the reset and a detailed inspection of the router logs were undertaken.

Whilst this work was underway a further drop was seen at approximately 11.20hrs. We were able to observe the failure on this occasion and all traffic was routed around the affected hardware which restored a stable service to customers that were not directly connected to the hardware involved.

We continued to receive a number of calls from DSL customers that were not connected, however this was typically due to persistent DSL sessions on the BT network, which were cleared through a reboot of the customer's CPE.

Work was then undertaken to ensure that the line card could be brought back into service and once we were in a position to move traffic back, a small amount of peering based traffic was placed through the card. This proved to be successful and further peering traffic was routed this way. Peering traffic was used, as it was deemed to be the least risk, as if further failure was seen, then traffic would use alternative peering arrangements.

Further monitoring has continued and the service remains stable with a reduced amount of traffic. Existing DSL traffic is currently routed via alternative paths, with this route being used as resilience.

Our engineering team are currently looking at whether the DSL traffic can be more permanently moved around the line card in question and simultaneously have a case logged with Cisco to fully understand the nature of the error seen.

We have been unable to replace the card at this point, as it will be beneficial for any Cisco support case to be able to see the card in situ. This combined with the removal of traffic, means that there is very little risk in leaving the card in place.

Follow up actions:

DSL Traffic will remain routed away from the affected card whilst diagnostics continue

We will look to move DSL traffic to alternative locations if possible, any move will be announced via our NOC site (noc.enta.net)

Conclusion:

We appreciate that this was a major issue for our customers, including those that take L2TP services from us. We apologise for any inconvenience that the problems caused and will be taking corrective action based upon managing our traffic and following Cisco advice in relation to the line card.