



Incident Report

Sharedband Service outage 16th March 2017

Executive Summary

On the 16th March, Sharedband experienced a critical service outage which impacted on services hosted in the London data centre.

At 13:08UTC, Sharedband's primary upstream internet link was disconnected. In an event of this nature, traffic should re-route via other internet links that Sharedband have available. This did not happen and a large portion of Sharedband's services were isolated.

A ticket with the provider was opened and the provider acknowledged that they were working to resolve an outage on their network. The incident was resolved by the provider at 13:51UTC.

Sharedband have been working with the provider to understand the events that caused the loss of traffic to our network. The final Incident report was released to Sharedband on 25th March. The outcome of the investigation is not as conclusive as what we had hoped for.

The next step will be to schedule a maintenance window with the Provider to recreate the events and allow engineers to troubleshoot the routing to ensure the incident does not happen again.

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Incident Details

On the 16th March at 13:08UTC, Sharedband Infrastructure engineers were alerted to an outage by monitoring systems. Upon investigation, it was found that the primary Internet uplink was in a down state. The upstream provider was contacted via telephone and a ticket opened. At 13:30UTC the provider acknowledged that they had lost power to a switch and were in the process of restoring power.

At 13:44 our Providers Support Department confirmed that power had been restored to the switch. They also confirmed that they could see that our connection was still down and that their engineers were trying to restore the link.

At 13:51UTC the link was restored and traffic was restored to Sharedband's services.

Root Cause Analysis

Since the outage, Sharedband have been awaiting a Root Causes Analysis report from the Provider to better understand the events that happened before and during the incident. The RCA was provided to us on the 25th March.

The provider had a Maintenance window between 02:00 and 06:00UTC on Thursday morning. During this maintenance window, they were replacing core routing equipment in their London Point-of-Presence. The maintenance was completed successfully within the communicated change window. However, engineers continued to work in the cabinet where the equipment was located. We do not know the nature of this work.

At 13:08, a power cable to a network switch was bumped and the switch lost power. We do not know if the power cable was completely knocked out or if it was still in the switch but dislodged to the point where it was not making sufficient contact to power the switch. We do not know how long the switch was without power before the engineers were notified and power was restored.

According to the Providers RCA report, Sharedband's network port did not initialise properly when the switch restored and network engineers had to disable and re-enable the port for the connection to Sharedband to re-establish again.

The RCA report does not explain why Sharedband's IP addresses appeared to still be advertised to the Internet by the provider during the outage, causing traffic to Sharedband to be black-holed in their network.

Mitigation

Sharedband will continue to investigate the cause of the traffic no rerouting with the provider in the coming weeks. A maintenance window will be opened for the early hours of a morning where there will be the least amount of disruption to our customers. The link between Sharedband and the provider will be disconnected and engineers will investigate routing to ensure that incident does not happen again.

Please see status.sharedband.net over the next few days for more details on when the maintenance window will be.