

Providing High Speed Broadband & Web Filtering Case Study



Organisation: Nottingham City Council
Industry: Education
Location: Nottingham

Challenge: To provide high speed broadband and centralized web filtering to 10 Primary Schools in various areas of Nottinghamshire.

Benefits: Increased speeds over previous ISP at a dramatically reduced cost with highly flexible, tiered filtering included.

Background:

Ten schools, managed by Nottingham City Council were looking for a more cost effective broadband provision. Each of the school's broadband contracts were up for renewal at the same time so we liaised with BT to provide 10 PFTTC connections from each site back to our central Data Centre in Stapleford. This type of connection is similar to a point to point leased line, providing a simple and high speed method of providing each school with broadband and allow us to route traffic through our central web filtering system. Unfortunately due to a last minute unforeseen error with BT's provisioning they were unable to provide the service to us and instead had to install standard broadband connections at every site. Knowing that this would not provide a direct link back to our Data Center, we acted quickly to engineer a new temporary solution that would provide the same results as PFTTC.

The Install:

The first stage of the process was to liaise with BT to arrange install dates of the new broadband connections at each site, this was performed over the course of two months. To simulate the same scenario as a PFTTC connection we created L2TP VPN Tunnels between our central Data Centre and each site that allowed us to seamlessly provide our own fast and secure filtered internet service. After the new connections were installed by BT we visited each site and installed Mikrotik routers that were pre-configured with L2TP details. The tunnels from each site provide a stable 80/20 connection speed and also allow Nottingham City Council to monitor the schools by connecting in over our AIT Backhaul Network.

The Next Step:

Being only a temporary solution, the next step is to continue liaisons with BT to arrange installation of the original PFTTC connections. This is going to be conducted seamlessly by providing first, another BT telephone line for this service to be activated on. The second connection will then be connected into our routers as well as the original service, this then enables a seamless transfer between services. As soon as we have confirmed the switchover the original temporary service can then be cancelled.

