

Charsfield Primary migrates to Windows Server, new network infrastructure and new laptops for teachers

Charsfield CEVCP School

“Charsfield CEVCP school is a small rural school situated approximately 12 miles from Ipswich.

The school accepts children between the ages of 4 and 11 after which pupils are moved to Thomas Mills High School.”

Situation

When we were introduced to Val Jones, Headteacher of Charsfield Primary, the school had been struggling with inconsistent behaviour of the school’s network. This was due to the misconfiguration of their Linux server that had been installed and setup by their previous IT contractor. Not only was it badly configured by the previous engineer, qualified Linux engineers are much more costly than Microsoft trained engineers. Microsoft trained engineers are also a lot more common so it should not be an issue should the school decide to switch between IT contractors.

The network cabling in the school was in dire need of attention as it had been continually added to in the last 10 years. The cable was of Cat5 standard and not Cat5e, so could not handle 1Gbps speeds in the future. Some of the additional points had even been stapled to the wall with a standard paper stapler. And a lot of the old surface mounted trunking was coming away from the walls as it had not been screwed down as well as using the self adhesive tape. The school also did not have any wireless capabilities so teachers were tied to hard-wired network points.

The teachers were using 5-6 year old Dell Latitude laptops bought under the original laptops for teachers scheme and so were unreliable and rather slow by today’s standards.

The school were previously signed into the Suffolk E2BN broadband setup that consisted of a single ADSL broadband link with web content filtering and a VPN connection to the Suffolk County network. The cost of this service was astronomical and connection to the county is not required.

Solution

To solve the school's network problems, we have installed a Windows Server and configured many Group Policies; these will keep the Windows environment locked down from pupil tampering and will present the users with a consistent interface and layout wherever they choose to log in.



The server stores all of the children and teachers work on its three 250GB hard drives that have been configured in a RAID-5 array. This means that if a drive fails, all that needs to be done is a new drive connected and users will not even notice. The server contains an Intel Quad core Xeon processor and 4GB of RAM that will keep the server performing well in the years to come; as well as being able to cope with other services asked of it such as the school's SIMS.net database, Windows Server Update Services, AVG Network Edition updates, etc.

The server is backed up with an Ultrium LTO 2 drive with 10 tape cartridges running on Symantec Backup Exec that is scheduled to run each night. All that needs to be done is change the tape each morning. The tape is then taken home each day by a member of staff in case of fire or theft.

The school has chosen to take on a support and maintenance contract that entitles them to a 4 hour response time for server issues and 8 hours for client problems. Usually any issue is dealt with as soon as possible, but the customer can be assured they will get the service they need well within the agreed response time. In addition to this, the school has a monthly site visit for pro-active support, during which we test that the backup is working correctly by restoring files from tape.

Previous to Total Solution, the school did not have any anti-virus defence and so we have installed and configured AVG Anti-Virus Network Edition that rolls out updates to the program and definition updates from the server to guarantee that all client computers are up to date all of the time.



Total Solution have completely re-cabled the school with Cat5e cable, running to dual network outlets around the school and fixed to the wall with new surface mounted trunking. The new points all run back to a central network cabinet where they are terminated into two 24-way Cat5e patch panels. We have installed two 24-port rack mount network switches and brush bar cable management to keep the cabinet tidy and so engineers can easily see what's going on.

Total Solution have provided new Toshiba Satellite Pro laptops for the teachers with 2.16GHz Intel processors and 1GB of memory running Windows XP Professional as a downgrade option to match the rest of their computers. These normally run off the network points we have installed but also have the option of running wirelessly with the 6 Netgear wireless access points we have installed to complement the new cabling system.

Lastly, the school decided to move away from the extremely expensive county provided broadband service. Total Solution have provided the school with a very cost effective solution to their web content filtering needs via a Zyxel USG100 security appliance that the school has complete control over, unlike the previous solution that was outsourced with poor service response time.



Benefits

The staff can now log into any available computer and receive the same consistent user environment that can be managed by us centrally on the server through Microsoft Group Policy. All of their work is stored on the new server and secured with their own usernames and passwords.

All users work is backed up onto tape each day, ensuring there is never any data loss. Therefore giving confidence to the users that they can trust the network.

The new network cabling is much neater and fulfils the school's requirements to a much higher degree than the old solution. It has been installed to industry standards so that the school can feel comfortable that it can easily expanded and maintained in a tidy and professional way.

Teachers can now get teaching faster with their new laptops and also use heavy multimedia presentations, interactive whiteboard sessions and complex multimedia websites without worries about their laptop lagging behind.

Lastly, the school has complete control over their web content filtering and have at the same time, saved thousands compared to the previous county-provided broadband and filtering solution.

For more information

For more information about Total Solution products and services, please call the Total Solution sales team on 0800 2985085.

www.totalsolution.co.uk

info@totalsolution.co.uk