



## Case Study



### Education ICT service supporting 90,000 users chooses 2X Software to ensure network availability

Cambridgeshire Education ICT makes IT services available for up to 70,000 students in Cambridgeshire Schools and 20,000 staff/Governors across the county - including secure remote access for around 17,000 staff and students. This huge operation requires not only a major terminal server farm, but robust systems to manage and balance the load to ensure maximum uptime and consistent access to email, video conferencing and management systems 24/7.

The organisation chose 2X Software to load balance their terminal services farm. **“2X LoadBalancer ensures we are able to deliver a high availability solution to Cambridgeshire schools ensuring their smooth day to day running,”** explains Leon Cripps, System Support Manager, Education ICT Service, Cambridgeshire County Council.

**“The single most important benefit of using the software has been that it has fitted in seamlessly with our existing infrastructure without the need to retrain staff or change systems management software,”**

*Leonard Veenendaal, Technical Services Manager, Cambridgeshire County Council.*

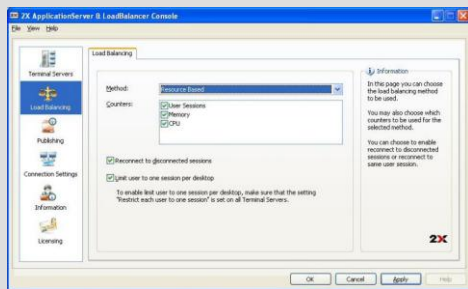
The Cambridgeshire Education ICT Service is part of Cambridgeshire County Council and offers a wide range of services to Cambridgeshire schools. These include Exchange 2007 Email, Centrally Hosted MIS (Terminal Services access to Schools Finance & Management Information Systems), Video Conferencing, Remote Access, Central Monitoring of School Servers and other Hardware, and OCS 2007 for Unified Communications. There are approximately 70,000 students in Cambridgeshire Schools and 20,000 staff/Governors. The service currently provides remote access to 2,000 staff and around 15,000 students.

In addition to loadbalancing the terminal services farm, 2X LoadBalancer software helps with scheduled maintenance. **“We need to be alerted when systems are not accessible and have a quick and easy process for taking terminal servers in and out of operation for maintenance, 2x ticked all of these boxes,”** says Leon.

**“We were careful to specify a robust system from the outset. In the two years we have been running the Centrally Hosted MIS system, we have only had to log into the 2X servers once monthly during scheduled downtime which shows just how reliable the 2X software has been.”**



*Leon Cripps, System Support Manager, Education ICT Service, Cambridgeshire County Council*



2X LoadBalancer intelligently distributes the load on the Terminal Server machine which has the least usage. By retrieving information about the Terminal Servers' resource usage before establishing the connection, it is able to determine the best Terminal Server to handle the incoming session.



The ICT service uses three Dell blade server racks like these:

### OS considerations

The Council chose 2X LoadBalancer as it allowed it to maintain a Windows platform on its Loadbalancers. It uses over 40 Dell Blade servers for all of its services and Windows Server 2003/8 Operating Systems. The ability to install 2X on a Windows OS was a deciding factor in choosing the software. **“This saved us from having to spend time learning how to support a new hardware appliance and allowed us to continue using our standard monitoring tools to give us continuity across all of our servers,”** comments Leon.

The Council is clearly keeping up with the latest access technology for its 240 Cambridgeshire Schools that connect to the central systems via 2Mb or 10Mb broadband lease lines. Users access the systems on a range of computers and operating systems and the email services can be accessed via smartphone or PDA.

### Administration and Support:

It took the ICT Service just minutes to install and configure. **“I rarely need to log in and change the settings which is a testament to how reliable it is,”** he explains. Leon also found 2X's technical support to be fast and efficient. **“We required support from 2X just once after first installation to resolve a query about disabling the printer feature. We were dealt with quickly and the issue was resolved the same day,”** he explains.

### The Future:

The Education ICT market is constantly evolving and Leon sees the implementation of centralised systems as a way that the Council can keep pace.

**“In order to deal with the increased capacity we will require, I can see the Terminal Services farm growing and published applications being a more effective way to deliver software to schools. Based on our experience with the 2X LoadBalancer software, if the 2X application publishing is of the same standard it will definitely be part of our plans,”** he says.

### About 2X Software

2X Software Ltd - 2X - is a company developing software for the booming server-based computing market. Thin client computing controls spiraling PC management costs, centralizes application and desktop management, improves security and performance and allows users to work remotely. The company's product line includes: 2X ThinClientServer, 2X LoadBalancer for Terminal Services/Citrix, 2X ApplicationServer for Windows Terminal Services, and 2X VirtualDesktopServer. 2X is a privately held company with offices in the USA, Germany, UK, Cyprus and Malta. Its management team is backed by years of experience in developing and selling network infrastructure software. 2X is a Microsoft and RedHat partner. For more information visit: <http://www.2x.com>